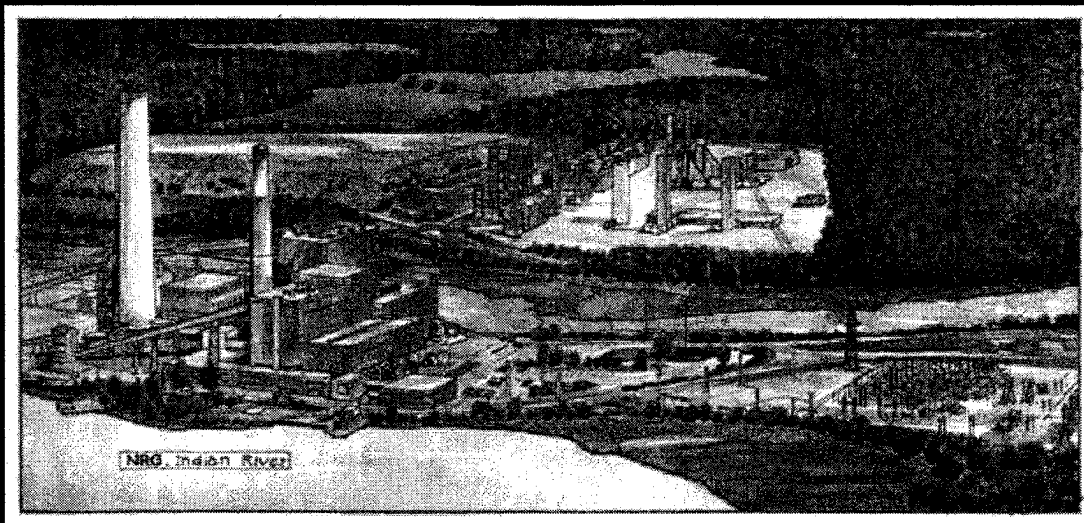


# **NRG Energy, Inc.**

## **Proposed Indian River IGCC Facility Millsboro, Delaware**



### **Construction of Innovative Base Load Generation For Delaware**

#### **Appendices – Volume 2**

**Request for Proposals :: Delmarva Power & Light**

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**Long-Term Supply of Innovative Clean Coal  
Capacity and Energy**

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December 17, 2006



**Confidential:** In accordance with the Delaware Freedom of Information Act, 29 Del. C. §10002(g), the following contains trade secrets and commercial or financial information of NRG Energy, Inc. and its subsidiaries that is of a privileged or confidential nature.

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## **About NRG Energy - Worldwide Plant List**

## OUR core values STRIVE

At NRG, our Core Values establish a framework for all of our strategies, decisions and behavior. They are more than words on a page or noble ideals; they are the standards by which we STRIVE to conduct our daily business, work with one another, and interact within the communities in which we operate.

Our Core Values also are the glue that binds us together and provides a basis for communication among our many business units located in several states and foreign countries. As such, our values are not voluntary. All NRG staff, from the top down, must reflect our Values every day and in every circumstance.

**S**afety: Safety Always First. We embrace safety as a core value with the goal being zero injuries but with a focus on preventative safety practices. We apply our safety standard as broadly as possible and apply it to all managers, supervisors, staff, contractors and visitors without exception.

**T**eamwork. Given the complexity of our business, it is essential to our success as a Company that we work together as an integrated team, harnessing the power of our combined skills, outlooks and efforts to address business opportunities and solve problems. We believe that "if we don't understand it, we can't solve it," and that no one individual has all the skills our Company needs. A key element of teamwork is our willingness to assist each other even in areas outside our individual skill sets. In our business, work falls unevenly from day to day so all of us have to contribute to a "lend a hand" culture.

**R**espect for Individuals, Community and the Environment. With opportunity comes responsibility—to each other, our neighbors and for the environment. We listen closely to one another and treat each other with respect. Our culture encourages the expression of differences of opinion, the critical but constructive examination of proposed courses of action and the evaluation of alternatives as the best way to achieve the optimal result.

We respect the fact that our local communities in which we operate are key stakeholders in our power plants and it is incumbent upon us to be a good neighbor in every sense of the word.

Finally, we respect the environment and work continuously to improve it. Our approach to the environment is a pragmatic one in that our Company recognizes that our society depends on electricity produced from fossil fuel-fired plants. Within that context, however, our Company is an agent of environmental improvement.

**I**ntegrity. We say what we mean and we honor our word in business dealings. Communicating with integrity—in a straightforward manner—is central to our open and honest communications with our colleagues, investors, regulators, customers and the communities in which we do business. That commitment to open and honest communication applies across all levels of the Company. We conduct our business with the highest degree of integrity, understanding that this is the foundation of a successful business. For NRG, corporate integrity goes beyond strict legal requirements—the letter of the law is the baseline for our actions as we seek to uphold standards that are superior to the legal requirement.

**V**alue Creation. We are not process oriented, we are value oriented. As individuals, as teams and as a Company, our goal is always to create value. The Company's capital resources, our physical assets and our professional expertise all are finite and must be applied in the manner which creates maximum value. As the way in which we deploy our resources to achieve maximum impact is constantly changing in our dynamic market environment, we need to constantly challenge the status quo to determine if there is a better way.

**E**xemplary Leadership. Regardless of our positions within the Company, we are all leaders at NRG. Our business requires all of us to be so, externally as well as internally. We exercise leadership by developing well thought out plans, effectively communicating those plans to all who would be affected by them and then by acting decisively to implement. Most of all, we exercise leadership, by example, demonstrating that we exercise our respective professional competencies in a manner consistent with "STRIVE."

## OUR strategy

NRG has an unrelenting focus on execution and prudent balance sheet management.

Our strong financial and operational performance has allowed NRG to pursue responsible financial growth opportunities that will enhance our portfolio of assets. NRG is constantly evaluating brownfield and greenfield investments, acquisitions and other prudent investment opportunities.

In 2005, NRG introduced *FORN*RG (Focus On Return on Invested Capital NRG) as a way for all of NRG's staff to contribute to NRG's growth. The program has a goal of adding \$200 million per year to the Company's bottom line by the end of 2009.



## staff profile\*

| Headquarters Location      | Princeton, NJ |
|----------------------------|---------------|
| <b>Domestic Staff</b>      | <b>3,038</b>  |
| Headquarters (Princeton)   | 292           |
| Northeast                  | 879           |
| South Central              | 298           |
| Texas                      | 1,107         |
| Western                    | 144           |
| Other North America        | 318           |
| <b>International Staff</b> | <b>284</b>    |
| <b>Total Staff</b>         | <b>3,322</b>  |

\*all numbers are approximate.



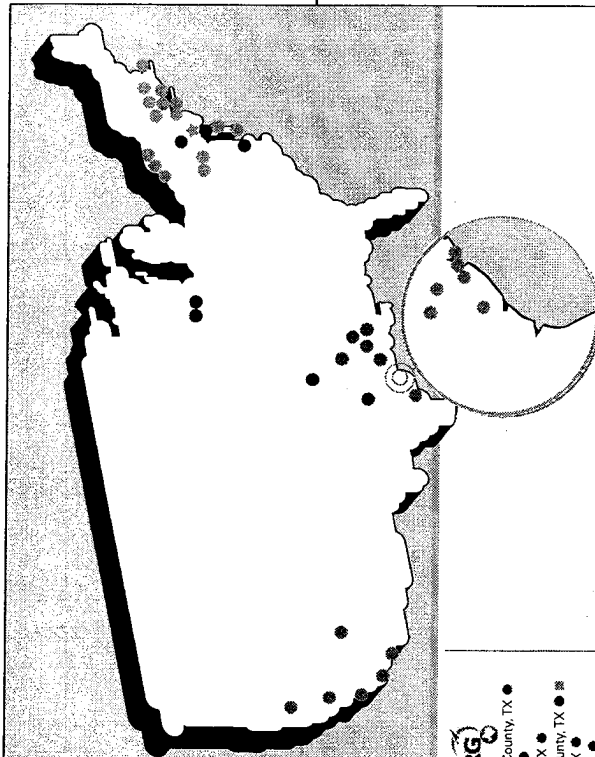
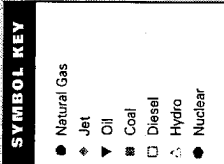
**NRG Energy, Inc.**  
211 Carnegie Center  
Princeton, New Jersey 08540  
609.424.3000

Rev. 8/29/2005

# NRG

ABOUT  
**nrge energy**

# OUR projects



**NRG TEXAS**  
HOUSTON  
Cedar Bayou, Chambers County, TX ●  
San Jacinto, LaPorta, TX ●  
Greens Bayou, Houston, TX ●  
W.A. Parish, Fort Bend County, TX ●  
S.R. Barton, Deer Park, TX ●  
T.H. Wharton, Houston, TX ●

**NORTHERN**  
Limestone, Limestone County, TX ●

**SOUTHERN**  
South Texas Project, Bay City, TX ●

**NORTHEAST**  
Arthur Kill, Staten Island, NY ●  
Astoria Gas Turbines, Queens, NY ●  
Conemaugh, New Florence, PA ●  
Connecticut Remote Turbines, Various, CT ◆  
Devon, Milford, CT ◆◆  
Dunkirk, Dunkirk, NY ●  
Huntley, Tonawanda, NY ●  
Indian River, Millsboro, DE ▼  
Keystone, Shelby, PA ●  
Middletown, Middletown, CT ▼◆  
Monvick Harbor, South Norwalk, CT ▼  
Oswego, Oswego, NY ▼◆  
Somerset Power, Somerset, MA ◆◆◆  
Vienna, Vienna, MD ▼

**SOUTH CENTRAL**  
Bayou Cove, Jennings, LA ●  
Big Cajun I, New Roads, LA ●  
Big Cajun I Peakera, New Roads, LA ●  
Big Cajun II, New Roads, LA ●  
Sterlington, Sterlington, LA ●

**WEST**  
Chowchilla II, Chowchilla, CA ●  
El Segundo, El Segundo, CA ●  
Encha, Carlsbad, CA ●  
Red Bluff, Red Bluff, CA ●  
Saguaro, Henderson, NV ▼  
San Diego Turbines, San Diego, CA ● □

**OTHER NORTH AMERICA**  
Dover, Dover, DE ●  
Paxton Creek, Paxton Creek, PA ●  
Power Smith, Oklahoma City, OK ●  
Rockford I, Rockford, IL ●  
Rockford II, Rockford, IL ●

**LATIN AMERICA**  
Niquira Energetics, Rondonopolis, Brazil ▲

**GERMANY**  
Schkopau, Halle ●  
MIBRAG-Wahlitz, Wahlitz ●  
MIBRAG-Deuben, Deuben ●  
MIBRAG-Mummsdorf, Mummsdorf ●

**AUSTRALIA**  
Gladstone, Gladstone, Queensland ●

★ NRG Headquarters

# OUR business

NRG Energy, Inc. provides reliable wholesale electricity safely and in a manner consistent with our civic and environmental commitment to the communities we serve.

We are a competitive power generation company with a portfolio distinguished by its range in geography, fuel source and dispatch level.



## GEOGRAPHY

NRG has projects in the Northeast, South Central, Texas and Western regions of the United States. We also have projects in Australia, Germany and Brazil.

## FUEL SOURCE

Our projects use a wide array of fuel sources including coal, nuclear, natural gas and oil.

## DISPATCH LEVEL

We have a balanced portfolio of baseload, intermediate and peaking units.

# OUR culture

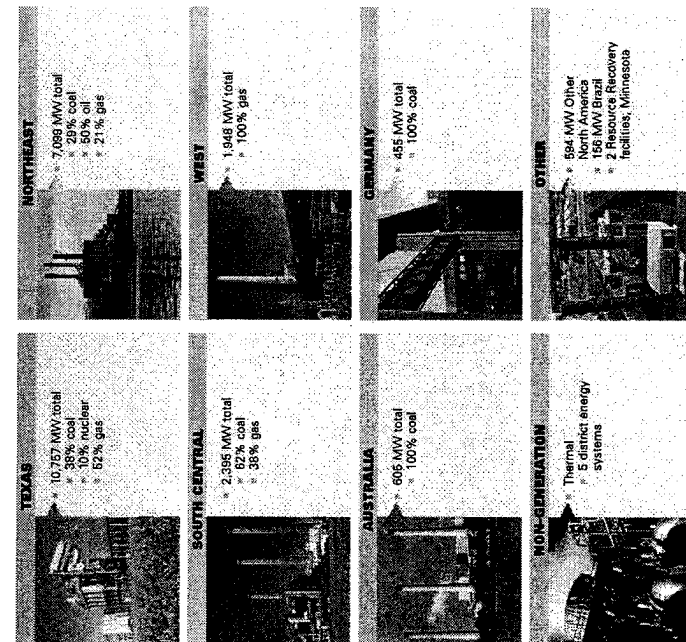
Located in Princeton, NJ, NRG's headquarters is a life-sized metaphor for the way we work. The headquarters building is one level and has no dividing walls, no offices—just an open floor plan. All headquarters staff work in an open layout designed to foster collaboration and promote informed decision-making. NRG is a non-hierarchical, flat, fast-moving organization.



# NRG ENERGY overview

- Ownership interest in 58 power generating facilities
- 24,009 MW net ownership
- Projects located in United States, Australia, Germany and Brazil

| LOCATIONS           | Total Net MW |
|---------------------|--------------|
| North America       |              |
| Northeast           | 7,099        |
| Texas               | 10,757       |
| South Central       | 2,395        |
| West                | 1,948        |
| Other               | 594          |
| Total North America | 22,793       |
| International       |              |
| Australia           | 605          |
| Europe              | 455          |
| Latin America       | 186          |
| Total International | 1,219        |
| Total               | 24,009       |





# NRG ENERGY PROJECTS

## NORTH AMERICA

| Texas                     | Location             | % Ownership | NRG Owned<br>(Net MW) | Fuel Type   |
|---------------------------|----------------------|-------------|-----------------------|-------------|
| Cedar Bayou               | Chambers County, TX  | 100.00      | 1,498                 | Natural Gas |
| Greens Bayou              | Houston, TX          | 100.00      | 760                   | Natural Gas |
| Limestone                 | Limestone County, TX | 100.00      | 1,715                 | Coal        |
| San Jacinto               | LaPorte, TX          | 100.00      | 162                   | Natural Gas |
| South Texas Project       | Bay City, TX         | 44.00       | 1,101                 | Nuclear     |
| S.R. Bertron              | Deer Park, TX        | 100.00      | 844                   | Natural Gas |
| T.H. Wharton              | Houston, TX          | 100.00      | 1,025                 | Natural Gas |
| W.A. Parish (coal)        | Fort Bend City, TX   | 100.00      | 2,480                 | Coal        |
| W.A. Parish (natural gas) | Fort Bend City, TX   | 100.00      | 1,191                 | Natural Gas |
| <b>Total Texas Region</b> |                      |             | <b>10,776</b>         |             |

## Northeast

|                               |                      |        |              |                          |
|-------------------------------|----------------------|--------|--------------|--------------------------|
| Arthur Kill                   | Staten Island, NY    | 100.00 | 841          | Natural Gas              |
| Astoria Gas Turbines          | Queens, NY           | 100.00 | 553          | Natural Gas              |
| Conemaugh                     | New Florence, PA     | 3.72   | 64           | Coal/Oil                 |
| Connecticut Remote Turbines   | Various CT (4 sites) | 100.00 | 104          | Jet Fuel                 |
| Devon                         | Milford, CT          | 100.00 | 141          | Natural Gas/Oil/Jet Fuel |
| Dunkirk                       | Dunkirk, NY          | 100.00 | 522          | Coal                     |
| Huntley                       | Tonawanda, NY        | 100.00 | 552          | Coal                     |
| Indian River                  | Millsboro, DE        | 100.00 | 737          | Coal/Oil                 |
| Keystone                      | Shelocta, PA         | 3.70   | 63           | Coal/Oil                 |
| Middletown                    | Middletown, CT       | 100.00 | 770          | Oil/Natural Gas/Jet Fuel |
| Montville                     | Uncasville, CT       | 100.00 | 497          | Oil/Natural Gas/Diesel   |
| Norwalk Harbor                | South Norwalk, CT    | 100.00 | 342          | Oil                      |
| Oswego                        | Oswego, NY           | 100.00 | 1,634        | Oil/Natural Gas          |
| Somerset                      | Somerset, MA         | 100.00 | 127          | Coal/Oil/Jet Fuel        |
| Vienna                        | Vienna, MD           | 100.00 | 170          | Oil                      |
| <b>Total Northeast Region</b> |                      |        | <b>7,116</b> |                          |

## South Central

|                                   |                 |        |              |             |
|-----------------------------------|-----------------|--------|--------------|-------------|
| Bayou Cove                        | Jennings, LA    | 100.00 | 300          | Natural Gas |
| Big Cajun I                       | New Roads, LA   | 100.00 | 430          | Natural Gas |
| Big Cajun II                      | New Roads, LA   | 86.26  | 1,489        | Coal        |
| Sterlington                       | Sterlington, LA | 100.00 | 176          | Natural Gas |
| <b>Total South Central Region</b> |                 |        | <b>2,395</b> |             |

## Western

|                                  |                         |        |              |                 |
|----------------------------------|-------------------------|--------|--------------|-----------------|
| Chowchilla II                    | Chowchilla, CA          | 100.00 | 49           | Natural Gas     |
| El Segundo                       | El Segundo, CA          | 100.00 | 670          | Natural Gas     |
| Encina (Cabrillo I)              | Carlsbad, CA            | 100.00 | 965          | Natural Gas/Oil |
| Red Bluff                        | Red Bluff, CA           | 100.00 | 45           | Natural Gas     |
| Saguaro                          | Henderson, NV           | 50.00  | 46           | Natural Gas/Oil |
| San Diego Turbines (Cabrillo II) | San Diego, CA (3 sites) | 100.00 | 173          | Natural Gas/Oil |
| <b>Total Western Region</b>      |                         |        | <b>1,948</b> |                 |



# NRG ENERGY PROJECTS

| Other North America              | Location                         | % Ownership | NRG Owned<br>(Net MW) | Fuel Type        |
|----------------------------------|----------------------------------|-------------|-----------------------|------------------|
| Dover Energy                     | Dover, DE                        | 100.00      | 104                   | Natural Gas/Coal |
| Paxton Creek                     | Paxton Creek, PA                 | 100.00      | 12                    | Natural Gas      |
| Power Smith Cogeneration         | Oklahoma City, OK                | 6.25        | 7                     | Natural Gas      |
| Rockford I                       | Rockford, IL                     | 100.00      | 310                   | Natural Gas      |
| Rockford II                      | Rockford, IL                     | 100.00      | 160                   | Natural Gas      |
| <b>Total Other North America</b> |                                  |             | <b>594</b>            |                  |
| <b>Total North America</b>       |                                  |             | <b>22,828</b>         |                  |
| <b>INTERNATIONAL</b>             |                                  |             |                       |                  |
| <b>Asia-Pacific</b>              |                                  |             |                       |                  |
| Gladstone                        | Gladstone, Queensland, Australia | 37.50       | 605                   | Coal             |
| <b>Total Asia-Pacific</b>        |                                  |             | <b>605</b>            |                  |
| <b>Europe</b>                    |                                  |             |                       |                  |
| MIBRAG                           | Theissen, Germany (3 sites)      | 50.00       | 55                    | Lignite Coal     |
| Schkopau                         | Halle, Germany                   | 41.90       | 400                   | Lignite Coal     |
| <b>Total Europe</b>              |                                  |             | <b>455</b>            |                  |
| <b>Latin America</b>             |                                  |             |                       |                  |
| Itiquira Energetica              | Rondonopolis, Brazil             | 98.73       | 156                   | Hydro            |
| <b>Total Latin America</b>       |                                  |             | <b>156</b>            |                  |
| <b>Total International</b>       |                                  |             | <b>1,216</b>          |                  |
| <b>Worldwide Power Projects</b>  |                                  |             | <b>24,045</b>         |                  |

The megawatt figures provided represent nominal summer net megawatt capacity of power generated as adjusted for the Company's ownership position excluding capacity from inactive/mothballed units.

## **Press Release on Repowering Plan**

**NRG Announces Comprehensive Repowering Initiative**

Company Release - 06/21/2006 07:06

PRINCETON, N.J.--(BUSINESS WIRE)--June 21, 2006--

NRG Energy, Inc. (NYSE:NRG) today announced plans to develop approximately 10,500 megawatts (MW) of new generation capacity over the next decade to help meet the energy needs of its high-demand, capacity-constrained markets and to support NRG's continued growth. This repowering initiative, which will be funded with the support of partners and project finance debt, would represent a total investment of \$16 billion.

With this repowering initiative, NRG will:

- Enhance its dispatch mix with almost 8,000 MW of new baseload capacity - including 2,700 MW of nuclear - and 2,500 MW of new, highly efficient intermediate and peaking capacity;
- Further diversify its fuel mix and reduce reliance on higher-priced, imported fuels, not only through its solid fuel repowerings, but also through the acquisition of a new wind development company with wind projects in active development in Texas and California;
- Create thousands of new construction jobs and 1,500 permanent jobs; and
- Reduce the carbon intensity of NRG's baseload fleet by 20-25 percent.

"NRG is strategically located in domestic markets with high and growing demand for power and an over-reliance on expensive natural gas for their power generation," said David Crane, NRG's President and Chief Executive Officer. "NRG's development program is designed to meet the growing energy needs of these regions, while both reducing their dependence on natural gas for power generation purposes and making meaningful progress towards reducing our carbon profile."

"Our proposed mix of baseload plants--involving two nuclear units, three gasified coal units, two traditional pulverized coal units with full back-end controls, at least one modern combined cycle plant and at least two wind farms--will substantially reduce the carbon intensity of NRG's existing baseload fleet, in particular, and of the nation's baseload coal alternative, in general," said Crane. "And our shareholders will benefit from the economic returns of these investments."

**Project Financing Preserves NRG's Financial Strength and Flexibility**

"Consistent with NRG's track record of financial discipline and capital allocation, the financing plan for these projects preserves NRG's balance sheet strength and liquidity," said Robert Flexon, NRG's Executive Vice President and Chief Financial Officer. "Investments will be underpinned by long term offtake contracts and hedges that support non-recourse project financing as well as third party equity partners and the Company's existing cash flows."

**Focus on Operational Excellence and Active Risk Management to Be Maintained**

"This repowering and development program builds on the foundation of operational excellence being advanced through our FORNRG initiatives. Our stakeholders can be confident that we will maintain our focus on aggressive cost controls and superior operating performance," Crane said.

Given the size, capital intensity and long development time for many of these new plants, particularly the baseload plants, NRG intends to contract at least 70 percent of its new output through power purchase agreements, bilateral contracts or hedges with financial firms. NRG's plants are located in regions that currently have significant opportunities for long term offtake agreements. For example, in the Northeast, request for proposals for power purchases have been announced or authorized in Connecticut, Delaware and New York; and bilateral contracts for wholesale power are being pursued by cooperatives, municipalities, investor-owned utilities and large industrials in California, Louisiana, and Texas. As an example, NRG has secured a significant power purchase agreement with SMEPA for 75 MW for 4.5 years that will carry them until BC II unit 4 goes commercial, at which time they will take equity (and the associated output) in the BC II unit 4 project.

**Environmentally Responsible Development**

All of NRG's proposed new generation will utilize a variety of state-of-the-art environmental technologies.

Upon completion of the development program, NRG will have increased its US solid-fuel generation capacity by 46 percent(1)



while reducing its air emissions and carbon intensity by 67 percent and 20-25 percent, respectively, compared to current levels.

Additionally, the expansions announced today will be built adjacent to existing generating units and use existing infrastructure, including roads and water treatment facilities, minimizing additional environmental impact to the surrounding areas.

#### Renewables (Wind)

NRG announced yesterday that it has reached a definitive agreement to acquire privately held Padoma Wind Power, LLC, a leading wind energy development and co-development company. NRG's acquisition of Padoma is part of "ecoNRG," the Company's ongoing environmental business effort, targeted at achieving continuous environmental innovation and improvement.

Padoma's principals have over 80 years of combined experience in the development, technical integration, financing, construction and operation of utility-scale wind energy facilities. Together, they have led the development, financing, construction and operation of more than 40 wind farms in the United States and Europe comprising over 1,300 MW of installed capacity. Padoma currently has three projects under active development independently, in addition to a pipeline of over a dozen wind projects which it is developing in conjunction with third parties. The projects under active development include over 500 MW of new wind generation in California, Texas and New Mexico.

The addition of a wind development team with a proven track record of execution is a meaningful step toward building a scaleable renewable energy platform. NRG anticipates future constraints on carbon production, increasing the cost of entry into the renewable energy market in the mid to long term.

"Acquiring Padoma is consistent with NRG's multi-fuel strategy and provides us with immediate access to industry-leading expertise and a robust project pipeline in the growing wind generation market," said Crane. "More than 20 states have passed legislation mandating a renewable portfolio standard as part of their efforts to curb emissions. With Padoma, NRG is well-positioned to meet this demand for renewable energy sources, while also reducing our own carbon intensity and providing financial upside opportunities through the expansion of our energy services offering."

#### Regional Overview

##### Texas

Texas's demand growth is among the strongest in the nation and in order to ensure the reliability of electrical service in the region, new plant construction is essential. NRG's development plan incorporates multiple technologies including gas peakers, pulverized coal and nuclear power. Each new plant's permitting and construction schedule varies, enabling NRG to meet expected demand growth as it develops.

NRG's repowering plan for Texas contemplates adding 3,500 MW of new baseload capacity using both coal and nuclear fuel, as well as 500 MW of more efficient, gas-fired peaking and intermediate capacity to serve particularly high-demand, capacity constrained areas around Houston. NRG also anticipates building wind facilities in Texas as part of the Padoma development portfolio.

"Texas has a broad and distinct history of meeting the nation's energy needs," said Texas Lieutenant Governor David Dewhurst, commenting on the nuclear and wind components of NRG's announcement. "This is a direct result of the can-do entrepreneurial spirit that has shaped our great state. Continuing to develop an alternative fuels industry in Texas will help ensure we remain an energy leader nationally for decades to come."

Recent developments in our Texas repowering initiative include:

- On June 19, 2006, NRG filed a letter of intent with the Nuclear Regulatory Commission to construct 2,700 MW of nuclear power at the existing South Texas Project (STP) nuclear facility
- On June 12, 2006, NRG filed an air permit application with the Texas Commission on Environmental Quality (TCEQ) for Limestone 3, a new 800 MW pulverized coal unit
- On June 21, 2006, NRG filed an air permit application with the TCEQ for uprating two W. A. Parish coal units by a total of approximately 100 MW by 2010. This project includes the installation of back-end emission controls (i.e. scrubbers). When the two scrubbers are added, emission of SO<sub>2</sub> (inclusive of Limestone 3 and the two uprates), will decline by approximately 30,000 tons annually.
- On May 1, 2006 NRG provided letters to state leaders in support of the FutureGen Industrial Alliance. One of two of

the Texas sites proposed for the FutureGen IGCC test unit would be on NRG-donated property near our Limestone facility

#### STP Units 3 & 4

Construction of Units 3 and 4 is expected to cost \$5.2 billion, creating approximately 3,000 construction jobs per unit during the peak construction period and an additional 500 new operating staff positions per unit. Our development plan for each of the new nuclear units is expected to create over \$9.2 billion of economic activity for the State and result in 5,600 new permanent jobs statewide.(2)

NRG will proceed with permitting and development of new nuclear power generation at STP based on ABWR nuclear power plant technology, which is proven in design and construction and has a track record of reliable and safe operation. NRG filed its letter of intent to submit an application with the Nuclear Regulation Commission on June 19, 2006 to construct two new ABWR units at STP. The ABWR technology is the most advanced nuclear technology in operation in the world today with a history of on time, on budget construction in Japan. The General Electric Company's ABWR design has been certified by the U.S. Nuclear Regulatory Commission. It is NRG's intent to work with GE and Hitachi, (which has been involved in developing and constructing four ABWR plants in operation in Japan) as well as GE's other international team of suppliers with experience in successfully constructing ABWR nuclear power plants.

"Nuclear power is an important part of the continued development of our baseload fleet in Texas,," said Steven Winn, NRG's Executive Vice President and President, Texas Region. "We recognize the need for new, low-cost generation and we recognize the importance of reducing the emissions profile of power generators within the growing ERCOT market."

#### Limestone Unit 3

NRG expects to invest \$1.2 billion to construct the new unit at Limestone. With prompt approval of the permit the unit could be online by 2012. Approximately 1,000 construction jobs will be created at peak construction and an additional 100 new permanent operating positions are expected upon commencement of commercial operations. The aggregate development plan for Limestone Unit 3 is expected to create over \$4.3 billion of economic activity for the State, and result in 1,800 new permanent jobs statewide, including 1,300 in central Texas.(3)

NRG anticipates that off-take for Limestone will be covered through a blend of bi-lateral negotiated contracts with local municipalities, industrials and coops as well as use of more market-based hedge instruments. NRG is currently in negotiations with a range of potential off-takers.

"The existing Limestone units are consistently among the safest units in the country, and maintain some of the country's highest capacity factors, and we expect the new unit to operate according to the same high standards," said Winn.

#### Parish Uprate and Associated Scrubbers

Under the plan filed with the TCEQ today, the output of Parish Unit 7 will be increased approximately 40 MWs in 2008, and the output of Parish Unit 6 will be increased by 60 MWs in 2010. Associated with these uprates, NRG will add one new scrubber at Parish in 2010, and a second new scrubber at Parish in 2014. The two scrubbers will result in reduced emissions of SO<sub>2</sub> of approximately 30,000 tons annually.

#### New Gas Capacity

In August, NRG intends to file a multi-site permit application to begin to update its Houston-based gas generation fleet. New, efficient gas units will be added to replace existing capacity. The new, fast-start units will provide better grid support within the Houston zone. These units should provide additional support for periods of high electricity demand, and produce a net reduction in emissions per MWhr generated. The anticipated total increase in capacity is approximately 500 MW.

#### Net Reduction in Emissions per MW.

NRG remains committed to providing additional generation to Texas in the most environmentally responsible manner possible.

Since 1999, NRG and its predecessor companies have spent in excess of \$700 million to add emissions control technologies to its existing generation fleet in Texas. This has resulted in a net reduction in nitrogen oxide (NO<sub>x</sub>) emissions of 75 percent. By scrubbing the two Parish units, NRG will continue this philosophy of proactive investment in environmental control technology. After the addition of this equipment, fleet sulfur dioxide (SO<sub>2</sub>) emissions will be reduced by a further 40 percent.

With the completion of two new nuclear units at STP, overall emissions intensity across the NRG Texas fleet will decline by a combined 20-30 percent.

#### Proposed New Generation Facilities in Texas

| Unit Name and Location | Fuel/Technology | Dispatch Additions | Gross MW Operations | Date of |
|------------------------|-----------------|--------------------|---------------------|---------|
|------------------------|-----------------|--------------------|---------------------|---------|

|                     |                             |              |       |           |
|---------------------|-----------------------------|--------------|-------|-----------|
| Limestone unit 3    | Coal/Pulverized Baseload    |              |       |           |
| Coal                |                             | 800          | 2012  |           |
| STP units 3 and 4   | Nuclear/ABWR                | Baseload     | 2,716 | 2014/2015 |
| Houston gas peakers | Natural Gas/CT, Peaker/CCGT | Intermediate | 500   | 2008-2010 |

#### Northeast

The NRG Northeast redevelopment plan calls for the addition of 2,250 MW of new baseload capacity using IGCC technology and 840 MW of new, dual-fuel oil and gas-fired intermediate and peaking capacity to serve particularly high-demand, capacity constrained areas, such as New York City and southwest Connecticut. As part of this plan, NRG expects to retire 968 net MW of less efficient, higher emitting units.

Recent developments in our Northeast repowering initiatives include:

- Completed a year long evaluation process to evaluate and choose a technology provider and assess both site feasibility and economic viability;
- Completed a thorough technological review of the IGCC technology providers resulting in the selection of a preferred coal gasification process;
- Initiated permitting process for each of the sites NRG plans to repower; and
- Developed a specific development and action plan for each state.

NRG expects to contract substantially all of its development projects in the Northeast through state administered processes. The contracts will range up to 20 years in length. These processes will commence as early as the fourth quarter of 2006 and are currently anticipated to be completed in the first half of 2007. NRG has performed extensive due diligence to prepare to participate in these processes and has begun the permitting processes.

NRG's Northeast development plan is expected to result in lower emission rates across the board, including a 59 percent reduction in SO<sub>2</sub>, a 49 percent reduction in NO<sub>x</sub>, an 84 percent reduction in mercury, and a 4 percent reduction in CO<sub>2</sub> intensity.

During peak construction NRG expects to create almost 3,000 construction and support jobs in the Northeast region. NRG expects to add an additional 300 permanent operating staff positions following completion of the development plan.

"Virtually all key stakeholders in the Northeast agree that new investment in power plants is needed to address rising and unstable power prices stemming from tightening of supply and demand and an over-reliance on natural gas as a fuel for power generation. This new investment must also address the need to reduce emission levels," said Curt Morgan, Executive Vice President and President, Northeast Region. "With NRG's Northeast development plan we address these critical issues with proposed investment in state-of-the-art power plant technology while increasing employment and driving additional economic activity throughout the Northeast."

#### Proposed New Generation Facilities in Northeast Region

| Unit Name and Location | Fuel / Technology | Dispatch Additions | Gross MW Operations | Date of   |
|------------------------|-------------------|--------------------|---------------------|-----------|
| Indian River, DE       | Coal/IGCC         | Baseload           | 752                 | 2011/2012 |
| Montville, CT          | Coal/IGCC         | Baseload           | 752                 | 2011/2012 |
| Huntley, NY            | Coal/IGCC         | Baseload           | 752                 | 2013/2014 |
| Cos Cob, CT            | Gas/CT            | Peaking            | 40                  | 2008      |
| Middletown, CT         | Gas/CCGT          | Peaking            | 300                 | 2009      |
| Devon, CT              | Gas/CCGT          | Peaking            | 200                 | 2009      |

#### South Central

NRG's development plan for the South Central region adds of 1,000 MW of new baseload capacity. Upon completion of this expansion as well as development projects already underway, NRG will have 2,775 net MW of generating capacity in the South Central region.

Recent developments in our South Central repowering initiative include:

- Agreed upon key terms with three parties for joint development and co-ownership of Big Cajun II Unit 4. South Mississippi Electric Power Association (SMEPA), East Texas Electric Cooperative and City of North Little Rock, Arkansas will collectively own 260 MW of the project.
- Bridge contract with SMEPA for 75 MW for 4.5 years
- Permit for Big Cajun I re-powering filed with LDEQ(4)

The South Central Region will utilize state-of-the-art emissions controls, including selective catalytic reduction (SCR), scrubbers, sorbent injection, and bag houses to meet Best Available Control Technology (BACT) requirements. The total cost of this equipment is projected to be approximately \$850 million and will generate net emission reductions of approximately 55 percent for SO<sub>2</sub>, 40 percent for NO<sub>x</sub>, and 70 percent for mercury while remaining net neutral on NRG's carbon intensity in the region.

During peak construction NRG expects to create approximately 1,400 construction and support jobs and a permanent operating staff of 70 is expected following completion of the development plans.

"By building coal-fired plants in gas-based markets, NRG will be able to provide consumers with lower-cost, stable and reliable energy solutions," said John Brewster, NRG's Executive Vice President and President, South Central Region. "This is yet another way that NRG will strengthen relationships with stakeholders in Louisiana and distinguish itself from other power producers in the region."

#### Proposed New Generation Facilities in South Central Region

| Unit Name and Location | Fuel / Technology            | Dispatch  | Gross MW   | Date of |
|------------------------|------------------------------|-----------|------------|---------|
|                        |                              | Additions | Operations |         |
| Big Cajun II - Unit 4  | Coal/Pulverized Coal         | Baseload  | 775        | 2010    |
| Big Cajun I            | Petcoke/Fluidized Bed Boiler | Baseload  | 230        | 2009    |

#### West

The expansion of NRG's portfolio in the West is predicated on receiving long-term off-take agreements from the incumbent utilities. NRG's development projects lie inside the Los Angeles and San Diego load pockets. Southern California Edison and SDGE are significantly short resources and have announced competitive solicitations for new generation. NRG intends to compete in these solicitations.

NRG has allocated \$1.5 billion for the West redevelopment plan, which contemplates adding 647 gross MW of new gas-fired base load capacity and 1,145 gross MW of new gas-fired intermediate and peaking capacity. NRG also anticipates building a new 150 MW wind facility.

Recent developments in our West repowering initiative include:

- Continued to satisfy the conditions associated with the combined cycle permit at El Segundo;
- Began the process leading to the dismantling of the retired units at El Segundo; and
- Initiated a permit process for a combined cycle plant at Encina.

The El Segundo site is currently permitted for a 640 MW combined cycle unit. The Long Beach site is in the process of being permitted. NRG is preparing a submittal for a 339 MW peaking facility at the Long Beach site.

The Encina site is located inside the SDGE service territory. SDGE has indicated a strong interest in immediate peaking capacity and future base load capacity at the Encina site. NRG is preparing a competitive bid of 339 MW of new peaking generation at the site, configured to be converted to 640 MW of combined cycle generation.

NRG has adequate emissions offsets to support the new generation at all of the California sites.

"Wind based energy will add another element of diversity to our fuel mix," said Steve Hoffmann, NRG's Senior Vice President and President, Western Region. "We are pleased to expand our presence in the West with this new wind capacity and new highly efficient gas-fired baseload as we strive to provide consumers with a more reliable energy supply."

#### Proposed New Generation Facilities in West Region

| Unit Name and Location | Fuel / Technology | Dispatch     | Gross MW Additions | Date of Operations |
|------------------------|-------------------|--------------|--------------------|--------------------|
| El Segundo             | Gas/CCGT          | Baseload     | 647                | 2011               |
| Long Beach             | Gas/CT            | Peaker       | 354                | 2009               |
| Encina                 | Gas/CCGT          | Intermediate | 730                | 2011               |
| Kearney Mesa           | Gas/CT            | Peaker       | 144                | 2011               |

#### Development Principles

The Company reaffirms that this comprehensive repowering initiative will be pursued in accordance with its longstanding commitments to prudent balance sheet management, risk diversification, return of capital to shareholders and construction based on long term contracts.

#### Webcast Information

NRG will host a live webcast for analysts, investors and the media at 1:30 p.m. eastern today, June 21, 2006, to discuss today's announcement. To listen to the live webcast and view the accompanying slide presentation, log on to NRG's website at <http://www.nrgenergy.com> and click on "Investors." To participate in the call, dial 877-407-8035. International callers should dial 201-689-8035. The call will be available for replay shortly after completion of the live event on the "Investors" section of the NRG website.

#### Satellite, C-Band Feeds:

| DATE               | TIME (all times EASTERN) | COORDINATES            |
|--------------------|--------------------------|------------------------|
| Wednesday, June 21 | 2:30 - 2:45 p.m.         | IA 5, Tr.13, DL 3960V  |
| Thursday, June 22  | 4:30 - 4:45 a.m.         | IA 5, Tr. 13, DL 3960V |
| Thursday, June 22  | 4:30 - 4:45 p.m.         | IA 5, Tr. 23, DL 4160V |

Technical Info DURING FEED ONLY, NBN TOC, 212-684-8910, EXT. 221

#### About NRG

NRG Energy, Inc. now owns and operates a diverse portfolio of power-generating facilities, primarily in Texas and the Northeast, South Central and Western regions of the United States. Its operations include baseload, intermediate, peaking, and cogeneration facilities, thermal energy production and energy resource recovery facilities. NRG also has ownership interests in generating facilities in Australia, Brazil and Germany.

#### Safe Harbor Disclosure

This news release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Such forward-looking statements are subject to certain risks, uncertainties and assumptions and include NRG's expectations regarding the timing, completion, costs, financing, environmental impact, job creation and financial success of the development projects described herein, and typically can be identified by the use of words such as "will," "should," "expect," "estimate," "anticipate," "forecast," "plan," "believe" and similar terms. Although NRG believes

that its expectations are reasonable, it can give no assurance that these expectations will prove to have been correct, and actual results may vary materially. Factors that could cause actual results to differ materially from those contemplated above include, among others, general economic conditions, permitting and regulatory obstacles, construction delays, the volatility of energy and fuel prices, changes in the wholesale power markets and related government regulation, the availability of financing and the condition of capital markets generally, our ability to access capital markets, and the inability to implement value enhancing improvements to plant operations and companywide processes.

NRG undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The foregoing review of factors that could cause NRG's actual results to differ materially from those contemplated in the forward-looking statements included in this news release should be considered in connection with information regarding risks and uncertainties that may affect NRG's future results included in NRG's filings with the Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov).

More information on NRG is available at [www.nrgenergy.com](http://www.nrgenergy.com)

(1)Based on net MW prior to equity sell down divided by existing coal capacity

(2)June 2006Texas and Matagorda County Economic Impact study prepared for NRG by The Perryman Group

(3)Based on Economic Impact Analysis Report prepared by Perryman Group dated June 2006

(4)Louisiana Department of Environmental Quality

Source: NRG Energy, Inc.

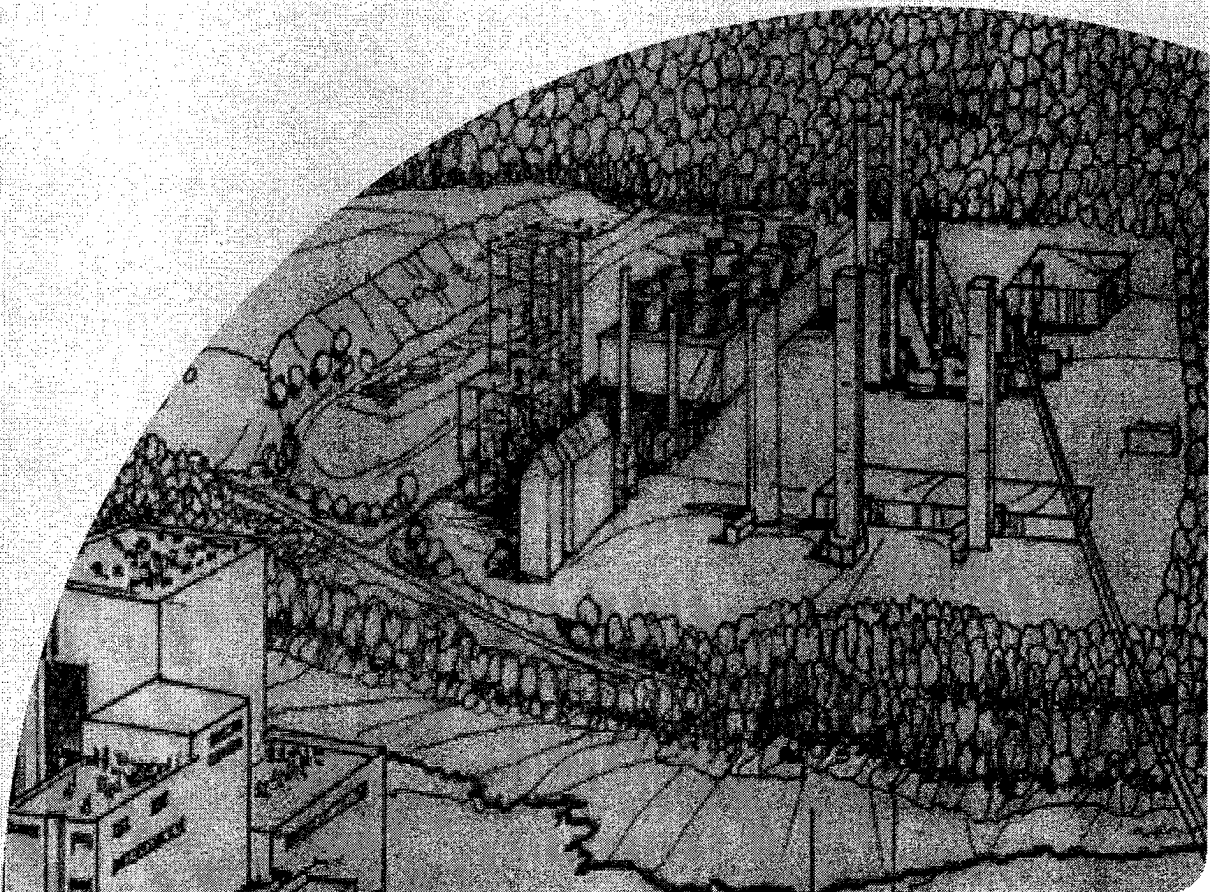
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## **Delaware Repowering Plans**



Powering Delaware with NRG

**CLEAR STRATEGIES. REAL ASSETS.**







## An Open Letter from: Curtis Morgan

PRESIDENT, NRG NORTHEAST REGION

As one of the leading electricity generators in Delaware, NRG Energy is pleased to offer our proposal for the redevelopment of the Indian River Generating Station. We call it **Powering Delaware with NRG**.

Delaware consumers demand and deserve electricity that is reliable, affordable and respectful of the environment. In order to meet these needs, Delaware will be required to upgrade and grow its energy infrastructure – both transmission and generation. As the State faces tightening energy supplies and environmental standards and a need to diversify its fuel mix, now is the time to focus on meeting the future electricity needs of Delaware.

Our **Powering Delaware with NRG** plan is designed to modernize, upgrade and grow our generating fleet. It will provide significant benefits to Delaware ratepayers by offering enhanced reliability and energy price stability through a more environmentally friendly generation mix.

- **Reliability** - Powering Delaware with NRG adds 630MW of new generation to our existing assets
- **Rate Stability** - Powering Delaware with NRG adds new gasified coal generation to minimize electric rate increases due to natural gas and oil price increases
- **Environmental Benefits** - Powering Delaware with NRG provides significant environmental improvements while advancing energy efficiency through the use of state-of-the-art technology, including equipment that can capture CO<sub>2</sub>
- **Economic Benefits** - Powering Delaware with NRG brings private investment and hundreds of jobs to Delaware

Delaware faces significant challenges to meet its energy infrastructure needs and maintain a growing economy. NRG stands ready to help the State of Delaware meet those challenges.

A handwritten signature in black ink that reads "Curtis G. Morgan".



## The Story on the Ground

Recent developments within the Energy and Environmental sectors pose significant challenges to the State of Delaware which affect the reliability, price stability, and environmental impact of its future energy supply:



### RELIABILITY

- Delaware is seeing unprecedented population growth – 17.6% average with 38% growth in Sussex County
- Pennsylvania-New Jersey-Maryland Interconnection (PJM) peak summer use is expected to grow at 1.6% as a whole while Delaware summer peak is expected to grow by 2% each year
- Delmarva Power's normal summer use is expected to grow from 4,070MW to 4,313MW by 2010 and 4,729MW by 2015
- Industry experts estimate shortfall in capacity beginning in 2008 in Delaware and across all of PJM, impacting Delaware's import capabilities
- Delaware, a power importer, needs to add new generation in order to ensure an adequate power supply for the future
- There are currently only 3 projects in the PJM queue for new capacity in Delaware for a total of 8MW



### PRICE STABILITY

- Delmarva Power retail customer rates were increased by 59% effective 5/1/06
- Natural gas prices remain high and continue to drive electric wholesale costs
- Adequate supply and fuel diversity are key to stabilizing electricity prices



### ENVIRONMENTAL IMPACT

- Clean Air Interstate Rule (CAIR) – was issued by EPA in March 2005. It contains an annual SO<sub>2</sub> cap-and-trade program, as well as an annual and Ozone Season NO<sub>x</sub> cap-and-trade program, dependent on a state's contribution to downwind fine particulate matter and Ozone concentrations
- Clean Air Mercury Rule (CAMR) – was issued by EPA in March 2005. It is a mercury cap-and-trade program affecting new and existing coal fired units greater than 25MW. Phase I starts in 2010 and has a national cap of 38 tons per year (TPY); Phase II starts in 2018 and has a national cap of 15 TPY

- Delaware Department of Natural Resources & Environmental Control (DNREC) is currently in the process of developing new multi-pollutant regulations for reducing emissions from Delaware power plants
- As a signatory to the Regional Greenhouse Gas Initiative (RGGI), Delaware carbon dioxide (CO<sub>2</sub>) emissions from power plants will be capped beginning in 2009. Delaware should support and embrace new generating technologies that will further advance the capture of CO<sub>2</sub> emissions

All of the above factors have a significant impact on the future of Delaware's energy supply policy. In response to these drivers, NRG Energy has developed this comprehensive redevelopment plan for the Indian River facility that addresses each of these major issues – reliability, price stability, and environmental impact.





## Plan Overview

**Powering Delaware with NRG** will dramatically change the generation supply profile in the State. The plan offers the State of Delaware the opportunity to create more reliable sources of electricity in Delaware, while helping to stabilize escalating electricity costs and continuing to improve the environment.

### SUMMARY

- Adds 630MW of highly efficient, baseload generation
  - Net increase in capacity 630MW
  - Technology: Integrated Gasification Combined Cycle (IGCC)
- Significantly reduces overall emission of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions across the fleet
  - Up to 90% reduction in overall SO<sub>2</sub> emissions rates
  - Up to 80% reduction in overall NO<sub>x</sub> emissions rates
  - Up to 75% reduction in overall mercury emissions rates

| LOCATION     | EXISTING<br>MW | NEW IGCC<br>MW | TOTAL<br>MW | NET +/-<br>MW |
|--------------|----------------|----------------|-------------|---------------|
| INDIAN RIVER | 737            | 630            | 1,367       | 630           |

### PLAN SPECIFICS

#### INDIAN RIVER STATION

- Construction of a new, baseload, gasified coal facility with the ability to capture carbon dioxide (CO<sub>2</sub>)
  - This new plant will assist Delaware in becoming less reliant on natural gas, contribute much-needed baseload generation to stabilize electricity prices and reduce overall emissions rates
- Installation of emissions controls on existing generating units
  - SO<sub>2</sub> Controls
    - In-Duct Injection
    - Wet Scrubber
  - NO<sub>x</sub> Controls
    - Low NO<sub>x</sub> Burners
    - Selective Non-Catalytic Reduction (SNCR)
    - Selective Catalytic Reduction (SCR)
  - Mercury Reduction
    - Fabric Filters/Activated Carbon Injection
    - SCR/Wet Scrubber

**PLAN REQUIREMENTS**

One of the key parts of this redevelopment plan is the construction of a new 630MW IGCC plant at Indian River. In order to finance this coal gasification project, NRG will need to secure a long-term contract for the output of the plant. NRG has taken an active role by working with the State of Delaware in an effort to develop a mechanism that will allow this to occur. This step is critical to the overall success of our redevelopment plan, which will not be possible without a long-term contract in place.



## Environmental Overview

Our redevelopment projects, which include both gasified coal technology for new generation and back-end controls for the existing units, will result in significantly reduced emissions rates for the Indian River facility.

The emissions rates from an IGCC plant are significantly below those of a pulverized coal (PC) plant and are more comparable to natural gas-fired generation. The ability to capture emissions on a pre-combustion basis makes it less costly for an IGCC plant to capture a greater amount of emissions than a traditional PC plant. The reason for this is that emissions are much more highly concentrated in their elemental forms before combustion than they are after combustion.

IGCC plants are superior to traditional PC plants with full back-end controls and are comparable to natural gas combined cycle plants in reducing sulfur and nitrogen oxide. In addition, IGCC offers the opportunity to re-sell some of the elemental byproducts of gasification. For example, approximately 99% of the sulfur in the fuel used in IGCC is converted to hydrogen sulfide ( $H_2S$ ), which can be removed pre-combustion and made commercially saleable, whereas in a PC plant under a post-combustion process, the sulfur is converted to sulfur dioxide ( $SO_2$ ) and sulfur trioxide ( $SO_3$ ) (contributors to acid rain).

Nitrogen oxides ( $NO_x$ ) from an IGCC plant are at very low levels – comparable to natural gas-fired plants – due to the fact that IGCC uses the same combustion process for creating the electricity.

The big distinction between IGCC technology and PC or natural gas-fired plants comes in the ability of IGCC technology to remove mercury (Hg) and, with further equipment,  $CO_2$ . Currently there is no proven commercial scale technology for PC plants that can remove Hg at the same levels or cost as an IGCC plant. Further, there is no commercial technology today for the capture and sequestration of  $CO_2$  from the flue gases of a PC or natural gas-fired plant. An IGCC plant can be configured to capture  $CO_2$  before the synthetic gas is combusted. This may be a critical feature as both regional and federal initiatives are underway to cap or reduce net  $CO_2$  emissions.

**IGCC PLANT EMISSIONS**

- SO<sub>2</sub> 0.04 lbs/mmBtu
- NO<sub>x</sub> 0.03 lbs/mmBtu
- Mercury 90+% reduction
- CO<sub>2</sub> Installed with equipment that will enable the capture of approximately 66% of the CO<sub>2</sub> and be comparable to a natural gas combined cycle plant

**OVERALL EMISSIONS RATE REDUCTIONS**

The expected emissions reductions will vary depending on which technology is installed. However, the expected overall reductions in emissions rates when compared to the existing permitted levels that are achieved by this redevelopment plan (including the IGCC and emissions controls projects) are shown below:

- SO<sub>2</sub> 90% reduction
- NO<sub>x</sub> 80% reduction
- Mercury 75% reduction

These reductions exceed new federal standards defined in EPA's Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR) and are comparable to Delaware's conceptual rule.





## What this Means for Delaware

The successful implementation of **Powering Delaware with NRG** provides for long-term benefits to both the State of Delaware and the Delmarva Peninsula. These benefits can be placed in the following categories:



### **RELIABILITY - POWERING HOMES AND BUSINESSES**

- Retention of existing units provides for continued reliable electricity supply
- Installation of IGCC increases the local generating capacity by 630MW and allows for added load growth



### **PRICE STABILITY - POWERING THE ECONOMY**

- Redevelopment plan is based on continued use of lower cost coal as the primary fuel source
- Allows for continued fuel diversity within Delaware and avoids over reliance on natural gas
- Long-term contracts result in much-desired rate stability for Delaware consumers



### **ENVIRONMENTALLY RESPONSIBLE**

- IGCC emissions are comparable to a natural gas combined cycle power plant – IGCC is the right technology at the right time in Delaware
- IGCC is able to capture CO<sub>2</sub>
- Emissions on existing units are significantly reduced
- Overall emissions rates will be significantly reduced for the entire site and exceed Clean Air Interstate Rule and Clean Air Mercury Rule requirements that are needed to meet Delaware's eventual regulations



### **ECONOMIC BENEFITS FOR DELAWARE**

- Indian River Generating Station currently employs 170 full-time employees from the local area
- IGCC construction would bring approximately 400-1,000 additional jobs during the construction period
- IGCC facility would add an additional 85-100 permanent full-time jobs
- IGCC is economically beneficial to the State, as a capital investment of approximately \$1.4 - \$1.6 billion will be invested in Delaware
- Emissions reduction projects investments are approximately \$330 million





## Powering Delaware with NRG Timeline

11.2005

NRG announces  
interest in  
developing  
gasified coal in  
Delaware

5.2006

NRG files  
interconnection  
studies for  
Indian River

6.2006

NRG announces  
specifics of  
redevelopment  
plan for  
Delaware

7.2006

Permitting  
processes begin  
at Department  
of Natural  
Resources &  
Environmental  
Control

11.2006

Requests for  
proposals for  
new generation  
issued

12.2006

Proposals for  
new generation  
in response to  
RFP due

2.2007

RFP evaluation  
complete;  
contract  
awarded

2007

Construction  
begins on  
emissions  
controls  
projects

2008

Permits  
awarded for  
Indian River  
IGCC plant

2008

Construction  
begins on  
Indian River  
IGCC plant

2011

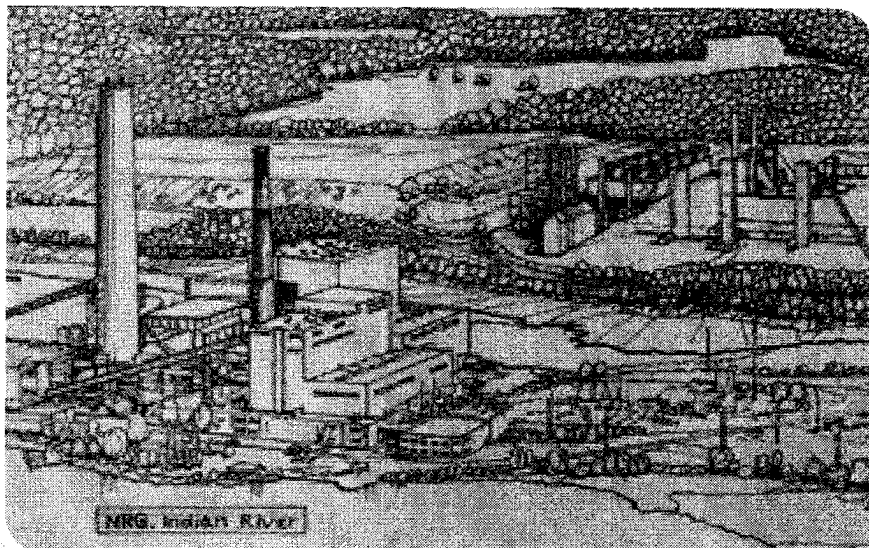
Emissions  
controls  
projects  
completed

2011-12

Commercial  
operation of  
Indian River  
IGCC plant

Indian River  
IGCC, 630MW





#### EXISTING PLANT

FUEL TYPE(s):  
Coal

#### DISPATCH LEVEL(S)

Load Following

| UNIT    | DATE | SIZE  |
|---------|------|-------|
| Unit 1  | 1957 | 80MW  |
| Unit 2  | 1959 | 80MW  |
| Unit 3  | 1970 | 150MW |
| Unit 4  | 1980 | 410MW |
| Unit 10 | 1967 | 17MW  |
| Total   |      | 737MW |

#### STAFFING

Current: 170

#### PROPOSED PLANT

FUEL TYPE(s):  
Coal, pet coke, biomass

#### DISPATCH LEVEL(S)

Load Following/Baseload

| UNIT    | DATE | SIZE:   |
|---------|------|---------|
| Unit 1  | 1957 | 80MW    |
| Unit 2  | 1959 | 80MW    |
| Unit 3  | 1970 | 150MW   |
| Unit 4  | 1980 | 410MW   |
| Unit 10 | 1967 | 17MW    |
| IGCC    | 2012 | 630MW   |
| Total   |      | 1,367MW |

#### STAFFING

Permanent: 255 – 270  
Construction: 400 – 1,000

#### CAPITAL COST

IGCC - \$1.4- \$1.6 billion  
Emissions Controls - \$330 million

## Indian River

#### PLANT DESCRIPTION

The Indian River Station provides low-cost, baseload generation to the Delmarva Peninsula, and is located near Millsboro, DE on a 1,100 acre site. The station consists of four coal-fired generating units and one oil-fired combustion turbine with a combined output of 737MW. Indian River's power is currently sold into the Pennsylvania-New Jersey-Maryland Interconnection (PJM).

#### INDIAN RIVER REDEVELOPMENT PLAN

The Indian River redevelopment plan is a two-part plan. The first part includes the construction of a 630MW gasified coal plant on the existing Indian River plant site. This plant would utilize Integrated Gasification Combined Cycle (IGCC) technology. The second part includes installation of major environmental controls on the existing generating units.

#### GASIFIED COAL TECHNOLOGY

The proposed IGCC facility at Indian River will provide a total generating capacity of approximately 630MW. This additional generating capacity that is provided by the IGCC will ensure continued reliable, low-cost, and environmentally responsible electricity to the State of Delaware and the region. It will be located adjacent to the existing facility and consist of gasification equipment, gas cleanup equipment, and combined cycle generation equipment. By being located at an existing facility such as Indian River, many benefits can be achieved by utilizing existing plant infrastructure such as rail, coal handling, water, and transmission facilities, building on an existing industrial site (brownfield), and at the same time capitalizing on our experienced skilled workforce. The current schedule for this project includes an in-service date of 2012.



**EMISSIONS CONTROLS - EXISTING FACILITIES**

The second part of the redevelopment plan consists of the installation of major emissions control equipment on the existing coal-fired generating units. The planned emissions controls projects will provide significant reductions in SO<sub>2</sub>, NO<sub>x</sub>, and mercury emissions. These projects will employ a number of technologies that are designed to provide emissions reductions and are consistent with current state-of-the-art pollution control technologies. The estimated cost for these projects is approximately \$330 million. Details on these projects follow:

**SO<sub>2</sub> CONTROLS**

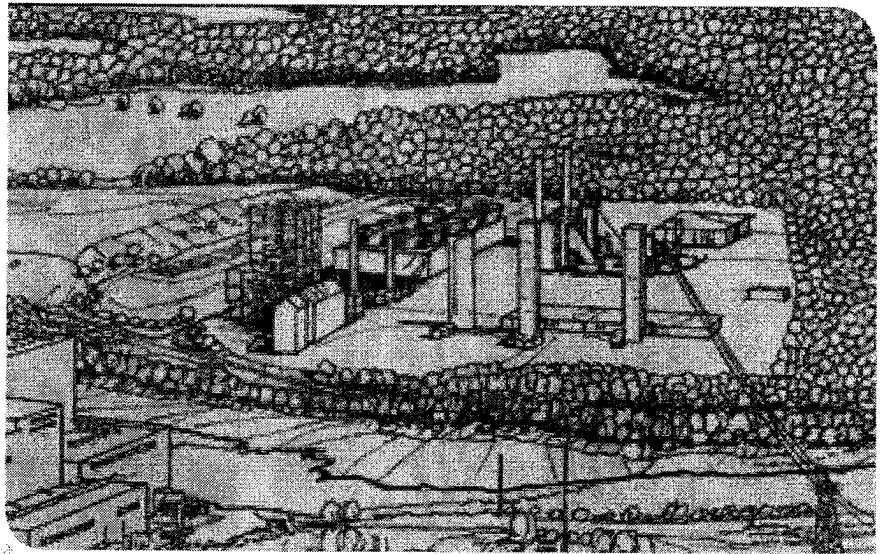
| UNIT   | DESCRIPTION       | IN-SERVICE |
|--------|-------------------|------------|
| Unit 1 | In-Duct Injection | 2009       |
| Unit 2 | In-Duct Injection | 2009       |
| Unit 3 | In-Duct Injection | 2009       |
| Unit 4 | Wet Scrubber      | 2011       |

**NO<sub>x</sub> CONTROLS**

| UNIT   | DESCRIPTION   | IN-SERVICE |
|--------|---|------------|
| Unit 1 | Low NO <sub>x</sub> Burners<br>Selective Non-Catalytic Reduction (SNCR) | 2009       |
| Unit 2 | Low NO <sub>x</sub> Burners<br>Selective Non-Catalytic Reduction (SNCR) | 2009       |
| Unit 3 | Low NO <sub>x</sub> Burners<br>Selective Non-Catalytic Reduction (SNCR) | 2009       |
| Unit 4 | Low NO <sub>x</sub> Burners<br>Selective Catalytic Reduction (SCR)      | 2011       |

**MERCURY CONTROLS**

| UNIT   | DESCRIPTION                              | IN-SERVICE |
|--------|--|------------|
| Unit 1 | Fabric Filter/Activated Carbon Injection | 2009       |
| Unit 2 | Fabric Filter/Activated Carbon Injection | 2009       |
| Unit 3 | Fabric Filter/Activated Carbon Injection | 2009       |
| Unit 4 | Wet Scrubber/SCR                         | 2011       |



## Gasified Coal Technology

### PROPOSED PLANT

#### TECHNOLOGY

Integrated Gasification Combined Cycle (IGCC)

#### FUEL TYPE

Domestic coal  
Ability to utilize biomass as well as traditional fuels

#### DISPATCH LEVEL

Baseload

#### UNIT SIZE

Total Size: 630MW

#### STAFFING

85-100 Employees  
400-1,000 Construction Jobs

#### CAPITAL COST

\$1.4 - \$1.6 billion

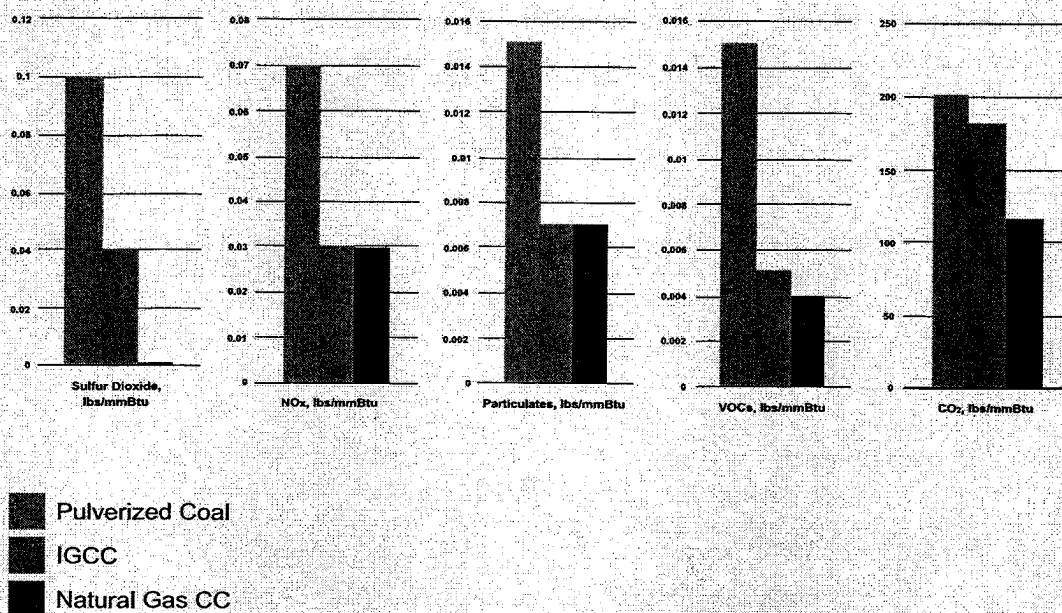
### GASIFIED COAL TECHNOLOGY

Gasified coal typically refers to the process of: (1) converting coal to a synthetic gas, (2) removing the pollutants (sulfur, mercury and CO<sub>2</sub>) from the synthetic gas before combustion, and (3) then combusting the cleaned synthetic gas as part of a combined cycle gas plant.

The process of gasifying coal is not new. This technology has existed since the 19th century. What is new is cleaning the synthetic gas and marrying the gasification process to a commercial scale combined cycle natural gas plant to generate electricity—hence the name “Integrated Gasification Combined Cycle” or “IGCC.” There are two operating IGCC facilities in the United States that produce electricity as their primary output and there are approximately 18 IGCC power plants outside of the U.S.

IGCC technology is highly attractive for its potential to provide reliable baseload service from abundant domestic fuel supplies, largely free of the price volatility of natural gas supplies.

IGCC generates low emissions and is comparable to natural gas-fired generation. Moreover, IGCC offers the advantage of the technical capability to capture CO<sub>2</sub> when sequestration technologies become available.



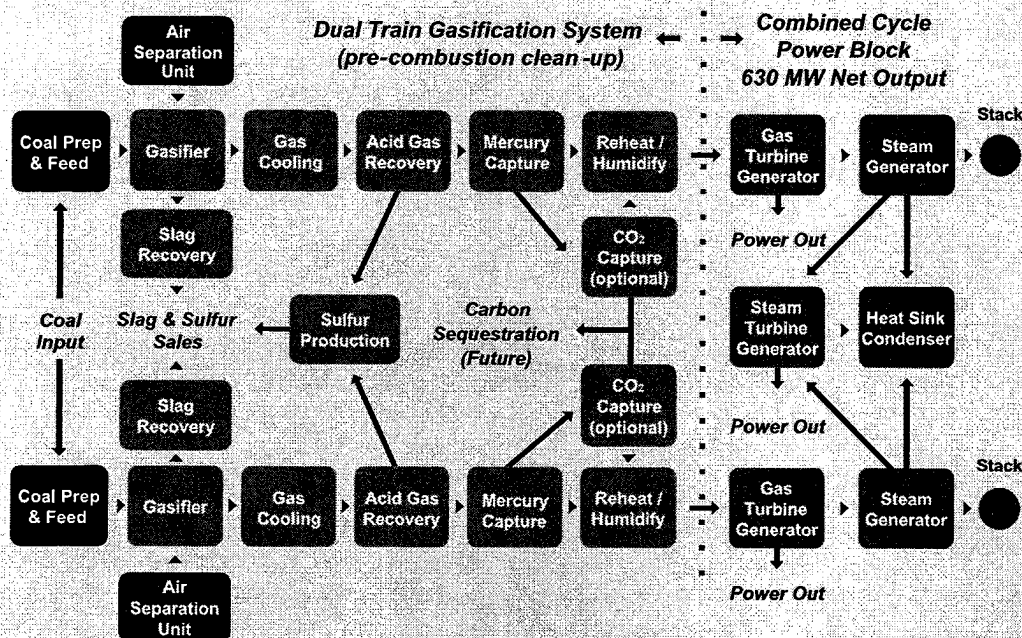
#### IGCC PROCESS FLOW

The differences in IGCC as compared to traditional pulverized coal (PC) plants center around fuel input and combustion. In a PC plant, the coal is pulverized into a fine dust then blown into a combustion chamber within the boiler and burned. The boiler is lined with water-filled tubes that, when heated to very high temperatures, physically convert the water in the tubes to steam. This steam is fed into a steam turbine, which turns a shaft in a generator and creates electricity. Before release into the atmosphere, some PC plants employ back-end controls to rid the exhaust gases of much of their  $\text{SO}_2$  (acid rain causing) and  $\text{NO}_x$  (ozone eroding) content.

In an IGCC plant, the same coal is pulverized, combined with pure oxygen and fed into a gasifier, where it is only partially combusted. It is this partial combustion process that is the key difference in the input stage of the IGCC power plant. The partially combusted coal is chemically changed into pure hydrogen and carbon monoxide. This new gas is known as synthetic gas. The synthetic gas is cleaned of a significant majority of emissions (sulfur, mercury and potentially  $\text{CO}_2$ ) before it is burned and fed directly into a combined cycle power plant.

The ability to capture emissions on a pre-combustion basis makes it less costly for an IGCC plant to capture a greater amount of emissions than a traditional PC plant. The reason for this is that emissions are much more highly concentrated in their elemental forms before combustion than they are after combustion.





#### SULFUR AND NITROGEN OXIDES

IGCC offers the opportunity to re-sell some of the elemental byproducts of gasification. For example, nearly 99% of the sulfur in the fuel used in IGCC is converted to hydrogen sulfide ( $H_2S$ ), which can be removed pre-combustion and made commercially saleable, whereas in a PC plant under a post-combustion process the sulfur is converted to sulfur dioxide ( $SO_2$ ) and sulfur trioxide ( $SO_3$ ) (contributors to acid rain).

Nitrogen oxides ( $NO_x$ ) from an IGCC plant are at very low levels – comparable to natural gas-fired plants – due to the fact that IGCC uses the same combustion process as the natural gas plant to generate electricity.

#### CARBON DIOXIDE AND MERCURY

The big distinction between IGCC technology and PC or natural gas-fired plants comes in the ability of IGCC technology to remove mercury (Hg) and, with further equipment,  $CO_2$ . There currently is no proven commercial scale technology for PC that can remove Hg at the same levels as IGCC. There is no commercial technology today for the capture and sequestration of  $CO_2$  from the flue gases of a PC or natural gas-fired plant. An IGCC plant can be configured to capture  $CO_2$  before the synthetic gas is combusted. There remains considerable research ahead to be able to effectively sequester  $CO_2$ .







## NRG Energy

### NRG POWER GENERATION

- Ownership interest in 59 power generating facilities
- 24,764MW net ownership
- Projects located in United States, Australia, Germany and Brazil

| LOCATIONS                     | TOTAL<br>NET MW |
|-------------------------------|-----------------|
| North America – Texas         | 10,757          |
| North America – Northeast     | 7,099           |
| North America – South Central | 2,395           |
| North America – Western       | 1,948           |
| North America – Other         | 649             |
| Total North America           | 22,848          |
| Australia                     | 1,305           |
| Europe                        | 455             |
| Latin America                 | 156             |
| Total International           | 1,916           |
| Total                         | 24,764          |

*The megawatt figures provided represent nominal summer net megawatt capacity of power generated as adjusted for the combined Company's ownership position excluding capacity from inactive or mothballed units.*

NRG Energy, Inc., a competitive energy provider, has a diversified generation portfolio, distinguished by its range in geography, fuel source and dispatch level. NRG's global portfolio of projects totals approximately 25,000 net MW.

Founded in 1989, NRG is a wholesale power generation company, primarily engaged in the ownership and operation of power generation facilities and the sale of energy, capacity and related products in the United States and internationally. We have a diverse portfolio of electric generation facilities in terms of geography, fuel type and dispatch levels, which helps us mitigate risk.

Operations include competitive energy production and cogeneration facilities, power marketing, district heating and cooling production, thermal energy production and resource recovery facilities. NRG's portfolio of projects is primarily in North America but also in Europe, Australia and Latin America. Our projects use a wide array of fuel sources including fossil fuels (natural gas, oil, coal and nuclear) and refuse-derived fuels.

NRG also has a diverse portfolio in terms of dispatch type. We have a variety of baseload, intermediate and peaking units to create a balanced portfolio. NRG's baseload units run most often and provide power to meet day-to-day needs, while our intermediate and peaking units are dispatched during periods of higher demand.



#### **POWERING DELAWARE WITH NRG**

Bob Sauer  
Regional Plant Manager  
Millsboro, Delaware

Ron Wilkosz  
Plant Manager, Indian River  
Millsboro, Delaware

Gerry Hopper  
Director, Asset Management  
Millsboro, Delaware

David Bacher  
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## **Sample Media Coverage**

## **NRG Eyes Buildup To Increase Power Output, Cut Emissions**

The Wall Street Journal

Rebecca Smith

6/21/06

NEW YORK (Dow Jones)--NRG Energy Inc. (NRG) is expected to announce a major power-plant construction initiative as early as today in which it would increase its power generating capacity by about 40% at a cost that could approach \$16 billion over the next decade, according to people familiar with the matter.

The plan includes two new nuclear units at NRG's existing South Texas nuclear power plant at a cost of \$5 billion, as well as coal plants in Delaware and either New York or Connecticut. The proposal also calls for a mixture of wind turbines, natural gas- and coal-fired plants and nuclear capacity in California, Texas and the south-central part of the U.S. The plants together would have a generating capacity of about 10,500 megawatts, equivalent to 20 major power plants.

NRG, which exited bankruptcy proceedings in December 2003 after shedding \$6 billion of debt, recently rejected a buyout offer from Mirant Corp., Atlanta, which itself completed bankruptcy reorganization at the beginning of the year.

People with knowledge of the proposed NRG program said Mirant was unaware of the plant-building initiative but that NRG's strong response in rejecting the unsolicited offer was partly based on fear it could upset or impede the building program on which employees had been working for about a year.

One person said plants wouldn't be built without contracts in place to purchase the output. One reason NRG went into bankruptcy was that it purchased expensive gas turbines and pursued projects without getting customers lined up first. When energy markets stumbled, it was left with enormous debt and inadequate cash flow to service that debt.

The company is expected to emphasize the impact of the program on emission of carbon dioxide. David Crane, NRG's chief executive, said in a recent investor meeting that he believes the power industry has a "moral imperative" to do more to reduced its output of carbon dioxide, a factor in rising world temperatures. Even though the plan represents an enormous increase in generating capacity, the new portfolio would represent a net decrease in carbon-dioxide emissions.

The company is expected to announce plans to build two big plants that convert coal to a gas and burn the fuel to make electricity. One would be in Delaware and one in New York or Connecticut, where states have committed to stabilize and then cut carbon output by 2015.

The move by NRG is similar to a recent announcement by TXU Corp., Dallas, which said it wants to build 9,000 megawatts of pulverized coal power plants in Texas in the next four years. NRG is expected to announce it intends to build two big pulverized coal power plants in Texas, as well, because that state is not moving to restrict carbon dioxide production, as other states are doing.

## **Power supplier NRG Energy to develop new power plants for \$16 billion**

Associated Press Newswires

6/21/06

PRINCETON, New Jersey (AP) - Power supplier NRG Energy Inc. said Wednesday it will develop power plants for \$16 billion (euro12.7 billion) over the next 10 years, adding 10,500 megawatts in new generating capacity in the United States.

The new plants are to include two nuclear units, three gasified coal units, two traditional pulverized coal units, at least two wind farms, and at least one plant that uses steam and gas derived from coal to spin its turbines.

NRG now generates more than 24,700 megawatts, mostly in Texas and the Northeast, South Central and Western regions of the United States. It also owns stakes in Australian and German plants.

A megawatt is enough power to serve between 700 and 1,000 homes.

"NRG is strategically located in domestic markets with high and growing demand for power and an over-reliance on expensive natural gas for their power generation," said NRG president and CEO David Crane.

The projects will be funded with the support of partners and project debt, NRG said. It anticipates creating 1,500 permanent jobs.

The announcement is the latest in a string of developments for Princeton-based NRG. On Tuesday, NRG said it would acquire Padoma Wind Power LLC, of La Jolla, California, which builds and operates wind power plants. Earlier this month, the company successfully fended off a nearly \$8 billion (euro6.3 billion) buyout offer from rival power producer Mirant Corp. of Atlanta.

## **UPDATE: NRG To Spend \$16 Billion In A Decade To Expand Power Capacity**

Dow Jones

6/21/06

NEW YORK (Dow Jones) -- NRG Energy Inc., the Princeton, N.J., power provider, confirmed plans to spend \$16 billion over a decade to expand its generating capacity and meet the needs of what it called "high-demand, capacity-constrained markets."

The project includes building two nuclear units, three gasified coal units, two pulverized-coal-fired units, at least one modern combined cycle plant -- which generates electricity in two ways from a single process -- and at least two wind farms.

NRG (NRG) said the plan, which was first reported by The Wall Street Journal, would add 10,500 megawatts of new power capacity. Of the total, 2,700 megawatts would come from two new nuclear plants in Texas costing \$5.2 billion.

NRG also said it plans to acquire Padoma Wind Power LLC, which is developing wind projects in Texas and California. Terms weren't disclosed.

"NRG is strategically located in domestic markets with high and growing demand for power and an over-reliance on expensive natural gas for their power generation," President and Chief Executive Officer David Crane said in a statement.

"NRG's development program is designed to meet the growing energy needs of these regions, while both reducing their dependence on natural gas for power generation purposes and making meaningful progress towards reducing our carbon profile."

NRG operates power facilities in Texas and in the Northeast, West, and South Central U.S. When the overall program is complete, the company said, "NRG will have increased its U.S. solid-fuel generation capacity by 46% while reducing its air emissions and carbon intensity by 67% and 20% to 25% respectively" from current levels.

The overall plan will "create thousands of new construction jobs and 1,500 permanent jobs," NRG said.

The financing plan for the project "preserves NRG's balance-sheet strength and liquidity," said Robert Flexon, NRG's executive vice president and chief financial officer, in a statement.

NRG also holds interests in generating facilities in Australia, Brazil and Germany. Earlier this month, Mirant Corp. (MIR) dropped an offer to purchase NRG rather than mount what it called a costly takeover battle.

Mirant, the Atlanta electricity provider, offered \$57.50 cash or 2.25 of its shares for each share of NRG. The deal was subject to proration to preserve a 50-50 cash-stock mix, for a blended value of \$57.16 per NRG share. The deal valued NRG at \$8 billion.

Mirant had said it was disappointed by NRG's rebuff. NRG said at the time that it would pursue its strategic plans, noting that its stock had more than doubled over the prior two years.

### **NRG Launches Multi-Billion Capacity-Expansion Program**

NJBiz

Shankar P.

6/21/2006

NRG Energy (NYSE: NRG) of Princeton today announced plans to develop about 10,500 megawatts (MW) of new generation capacity over the next decade. NRG said the \$16 billion "repowering initiative," to be financed by partners and project-finance debt, would represent a total investment of \$16 billion. The company plans to contract at least 70% of its new output through power purchase agreements, bilateral contracts or hedges with financial firms.

NRG said the expansion will help meet the needs of its "high-demand, capacity-constrained markets." Among other benefits, the expansion will help NRG further diversify its fuel mix and reduce reliance on higher-priced, imported fuels. It will also create and 1,500 permanent jobs thousands of new construction jobs, but details weren't immediately available.

The company also announced an agreement to purchase, for an undisclosed amount, Padoma Wind Power, a California-based wind-energy development firm. Padoma has been involved in the construction of more than 40 wind farms in the U.S. and Europe comprising more than 1,300 MW of capacity; it has three projects in independent development and another dozen in development with third parties. NRG says the transaction will be funded with cash on hand and should close by the end of July.

NRG Energy now owns and operates a diverse portfolio of power-generating facilities, primarily in Texas and the Northeast, South Central and Western regions of the country. It also has ownership interests in generating facilities in Australia, Brazil and Germany. The company's share price slipped slightly to trade at below \$47 in mid-morning trades.

### **NRG sets \$16 billion, 10,442 MW buildout**

Megawatt Daily  
6/22/06

NRG Energy plans to spend \$16 billion in the next 10 years building 10,442 MW, including two nuclear units and three integrated gasification combined-cycle plants.

NRG expects to build new plants next to existing generating units in California, Louisiana, the Northeast and Texas, David Crane, NRG president and CEO, said during a conference call.

Under the plan, NRG's generating portfolio would jump from 22,693 MW to 27,900 MW, after partners take shares in some of the proposed projects. NRG expects to finance the power plants with non-recourse debt, Crane said.

NRG is in the early stages of developing the projects, he said. Glenrock Associates' energy analyst Paul Patterson agreed. "These sound more like opportunities as opposed to firmly committed projects," Patterson said. "Additional milestones have to be met for [NRG] to go and build them."

NRG isn't alone in proposing major generation additions. Earlier this year, Dallas-based TXU said it planned to build up to 16,600 MW of coal-fired generation, mainly in Texas and the PJM region. TXU June 8 said it has agreed to buy eight 858-MW boilers from Babcock and Wilcox. TXU hired Bechtel Power and Flour to design and build 11 power plants in Texas totaling 9,080 MW.

NRG believes its plan is attractive because it sees supply shortfalls by 2008 in the markets where it operates, Crane said.

Also, nuclear and coal-fired generation will provide an alternative to areas such as Louisiana, the Northeast and Texas that have significant amounts of gas-fired generation, Crane said.

Princeton, New Jersey-based NRG intends to contract at least 70%, on average, of its new output through power purchase agreements, bilateral contracts or hedges with financial firms.

The amount of contracted energy and capacity would vary from plant to plant, Crane said. Plants in Louisiana may be 100% contracted while plants in Texas, which has a strong



merchant market, could be 50% contracted, Crane said. NRG won't build plants without contracts in place, which could range in length from 10 to 20 years long, he said.

The independent power producer sees ample opportunity to enter into long-term contracts in the areas where it operates and plans to build the new plants. In the Northeast, requests for proposals for power purchases have been announced or authorized in Connecticut, Delaware and New York, while cooperatives, municipalities, investor-owned utilities and large industrials in California, Louisiana and Texas are seeking bilateral contracts, according to the company.

NRG's expansion plan could make the IPP more attractive to another company that may want to buy the company, Crane said. "This growth program would be very attractive to anyone who might be acquiring us," he said. NRG, which exited bankruptcy in December 2003, earlier this month rebuffed efforts by Mirant to buy the company for \$8 billion.

If fully implemented, the plan would lower NRG's carbon emissions "intensity" by 20% to 25% by adding air pollution equipment at certain sites, retiring older units and adding nuclear and wind capacity. NRG expects its carbon emissions to fall from about 0.9 tons/MWh in 2005 to 0.7 tons/MWh in 2015. If a so-called carbon tax is imposed, NRG would benefit from its reduced MWh emissions, Crane said.

#### **Texas**

Nuclear energy is a key part of NRG's development plan. The company filed a "letter of intent" June 19 with the Nuclear Regulatory Commission to build two nuclear units totaling 2,716 MW at the existing 2,500-MW South Texas Project nuclear facility. NRG has a 44% stake in STP, located in Matagorda County, Texas.

NRG expects to file a formal application with the NRC in 2007, Crane said. The plant was originally designed for four units, he said.

NRG expects the two proposed units, using advanced boiling water reactors, to cost \$5.2 billion. If approved, NRG expects the first unit to come online in 2014, with the second unit starting operations a year later. The Austin and San Antonio municipal utilities own 56% of STP and have the right to participate in any added units, Crane said. NRG, which would like to stake 44% in 16,600 MW of coal-fired generation, mainly in Texas and the PJM region.

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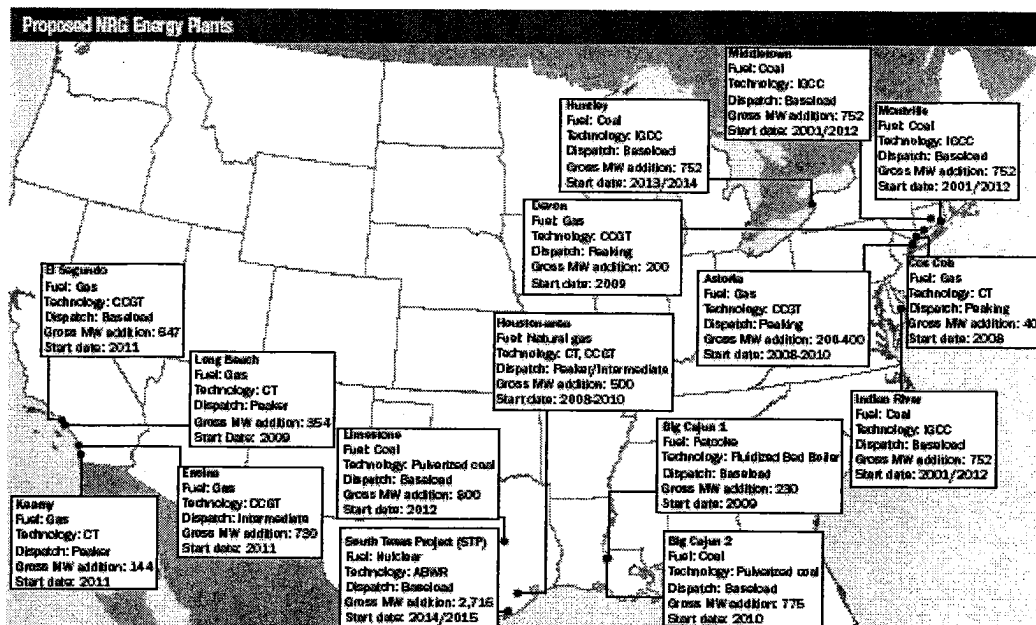
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starting operations a year later. The Austin and San Antonio municipal utilities own 56% of STP and have the right to participate in any added units, Crane said. NRG, which would like to stake 44% in the new units, has been approached by other companies in the nuclear business that would like to be involved, Crane said. Also, several large industrial power users have indicated they would like long-term contracts with any new units, he said.

Because it could be difficult to arrange non-recourse funding for a stand-alone nuclear project, NRG is considering bundling the financing of the nuclear expansion with other power plants in Texas, said Robert Flexon, NRG CFO.

Also in Texas, NRG expects to spend \$1.2 billion building an 800-MW pulverized coal unit at its Limestone plant. NRG filed an air permit application with the Texas Commission on Environmental Quality on June 12. If the permitting process goes smoothly, the unit could be in service in 2012, NRG said.

NRG is in talks with possible off-takers for the proposed Limestone unit. The plant's output will be covered through a blend of bilateral negotiated contracts with local municipalities, industrials and co-ops as well as use of more market-based hedge instruments, NRG said.

NRG June 21 filed an air permit application with the TCEQ for uprating two W. A. Parish coal units by a total of 100 MW by 2010. The project includes adding scrubbers to the plant, which will reduce sulfur dioxide emissions by about 30,000 tons a year.

In August, NRG intends to file a multisite permit application to upgrade its Houston-based gas generation fleet. Under the proposal, NRG will add new natural gas-fired units to replace existing capacity. The new, fast-start units will provide better grid support within the Houston zone, NRG said. With the new units coming online from 2008 to 2010, NRG will increase its gas-fired generation in Houston by about 500 MW, the company said.

NRG also expects to add 300 MW of wind generation in Texas through Padoma Wind Power, a La Jolla, California-based developer that the company has agreed to buy, NRG said. NRG expects to spend about \$750 million adding 450 MW of wind in the US. Crane rebuffed the idea that there could be an overbuild of nuclear or coal-fired generation in Texas. The barriers to building a nuclear plant on a "greenfield" site are so high, NRG doesn't see competition there, Crane said. As for coal-fired generation, baseload demand in Texas is growing so rapidly that even if all proposed coal-fired plants are built, gas-fired generation would remain on the margin, he said.

### **Northeast**

In the Northeast, NRG plans 2,250 MW of baseload capacity using IGCC technology and 840 MW of new, dual-fuel oil and gas-fired intermediate and peaking capacity. Part of the plan calls for NRG to retire 968 MW of less-efficient, higher emitting units.

NRG expects to sell the output of the Northeast units through long-term contracts of up to 20 years through state administered processes. NRG expects the solicitations to start as early as the fourth quarter and be completed in the first half of 2007. NRG has begun the permitting processes for the plants.

NRG plans 752-MW coal-fired IGCC plants in Millsboro, Delaware, Montville, Connecticut, and Huntley, New York. The \$1.47 billion plants would start operations from 2011 to 2014. NRG is working with Shell on the IGCC projects.

NRG plans to add a 40-MW gas-fired combustion turbine in Cos Cob, Connecticut, in 2008; a 300-MW combined cycle gas turbine in Middletown, Connecticut, in 2009; a 200-MW CCGT in Devon, Connecticut, in 2009; and a 200-MW to 400-MW CCGT unit in Astoria, New York, from 2008 to 2010.

#### California

In California, NRG is focused on the Los Angeles and San Diego load pockets where the company wants to add 1,942 MW.

Southern California Edison and San Diego Gas & Electric need generating resources and have announced competitive solicitations for new generation, according to NRG.

NRG has allocated \$1.5 billion for its California redevelopment plan, which contemplates adding 647 MW of new gas-fired baseload capacity and 1,145 MW of new gas-fired intermediate and peaking capacity. NRG also anticipates building a new 150-MW wind facility, the company said. NRG is preparing a competitive bid of 339 MW of new peaking generation at its Encina site in SDGE's service territory. The plant will be configured to be converted to 640 MW of combined-cycle generation, the company said. NRG said it has emissions offsets to support the new generation at all of the California sites.

#### Louisiana

In Louisiana, NRG plans to add 1,005 MW of coal-fired generation. The company has agreed to key terms with three parties for the joint development and ownership of the 725-MW Big Cajun II Unit 4, NRG said. South Mississippi Electric Power Association, East Texas Electric Cooperative and the city of North Little Rock, Arkansas, will collectively own 260 MW of the project. The unit is expected to be in service in 2010, NRG said.

NRG also plans to add a fluidized boiler bed to its Big Cajun I plant, increasing its capacity by 230 MW. NRG has signed a 75-MW bridge contract with SMEPA for 4.5 years, when the new unit is expected to be online, the company said.

#### **Power expansion to avoid past mistakes-NRG's Crane**

Reuters  
6/21/06

BAY CITY, Texas, June 21 (Reuters) - NRG Energy Inc.'s <NRG.N> Chief Executive David Crane said on Wednesday that the company's plan to expand and replace its "aging fleet" of power plants will avoid the mistake of overbuilding that led to the 2002 collapse of wholesale electric prices and the merchant generation industry.

"Clearly, we are coming out of a trough of the overbuild of 2000 to 2002, but nationally, (electric) demand has absorbed most of that," Crane said at a press conference at the South Texas Project, a 2,500-megawatt nuclear plant in which NRG owns a 40-percent stake.

Princeton, New Jersey-based NRG on Wednesday unveiled a plan to invest \$16 billion over the next decade to build 10,500 MW of new generation, primarily at its existing power-plant sites in six states.

The plan includes doubling the output at Texas's largest nuclear plant, along with another 1,300 MW in the state; building 3,000 MW to serve high-demand areas in the U.S. Northeast; 1,800 MW in California; and 1,000 MW in Louisiana.

NRG's program is designed to meet a growing appetite for electricity in these regions "while both reducing their dependence on natural gas for power generation and making meaningful progress toward reducing our carbon profile," Crane said in a statement.

"We don't anticipate an overbuild this time," Crane told reporters. "The barriers to entry to build nuclear and coal plants are greater" than for building natural gas-fired power plants that accounted for almost all new construction in the past decade.

Crane said another lesson learned from the recent boom-bust cycle is the need to obtain long-term contracts to sell the new power to be produced in advance of construction. NRG said it will contract 70 percent of the new production through contracts or financial hedges. In the past year, Crane said he has seen a growing willingness from state regulators and customers to consider long-term contracts. "It's a big change," Crane told Reuters.

Uncertainty surrounding the future of carbon emissions remains "the 800-lb gorilla" facing power-plant developers, Crane said.

While the debate goes on about carbon's potential damage to the environment, Crane said NRG's plan balances new fossil-fueled plants with emission-free wind and nuclear.

"If you can avoid (producing) carbon, why would you not do that?" he said.

Crane described the \$5.2 billion plan to add two 1,350-MW nuclear reactors in Texas as "the most ambitious, but environmentally and economically, the most compelling."

NRG joins a growing number of U.S. companies, including Exelon Corp. <EXC.N>, Southern Co. <SO.N> and Entergy Corp. <ETR.N>, that are considering building new nuclear reactors. None has yet committed to build a new reactor.

"We like our chances to be in the first wave of new plants," Crane said. NRG will use a nuclear-plant technology common in Japan, he said, to reduce its risk.

### **Indian River plant in line for cleanup, possible expansion**

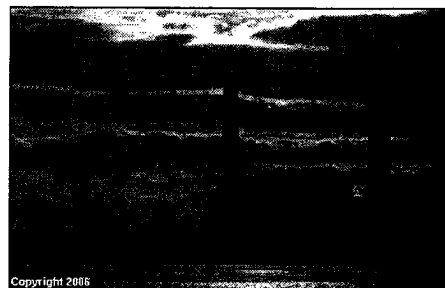
Delaware News Journal

06/21/2006

NRG Energy Inc. said it would spend as much as \$1.6 billion to clean and possibly expand the Indian River Power Plant in Millsboro, one of the largest sources of pollution in Delaware.

Joined by state officials, executives from the Princeton, N.J.-based company said that if the plant is constructed, it could sell electricity on the Delmarva peninsula at or below current prices.

Company officials said they are committed to cleaning



Copyright 2006

the existing 700-megawatt, coal-fired plant. But expanding the facility – which would nearly double its output with 630 additional megawatts – requires that the company secure a 15- to 20-year contract to sell electricity.

- The expansion is also contingent on electricity prices remaining around current levels. It would be threatened if prices fall dramatically.
- Construction could start as early as 2008, with completion possible as early as 2012.
- The plant would be a coal-gasification fired, using a process which crushes coal and turns it into a synthetic gas that is burned for electricity. The gasification process is nearly as clean as and cheaper than natural gas, prices of which have spiked in recent years.
- The plant would be equipped with the basic pipes to capture carbon dioxide emissions, but the technology needs to be developed further before it is capable of doing so.
- Earlier this year, Department of Natural Resources and Environmental Control officials said Indian River was the state's leader for hazardous emissions in 2004, accounting for 46 percent of the state's total releases to air, water or soil.
- Gov. Ruth Ann Minner said the state is not providing subsidies or guaranteeing any contracts.
- Today's announcement coincided with a press release by NRG, in which it said it plans to spend \$16 billion to build new plants, including nuclear reactors in Texas, to capitalize on increasing electricity demand.

#### **Del. Governor Announces Plans to "Repower" Indian River Plant**

WBOC (DE)

Alyson Cunningham

6/21/06

DOVER- Governor Ruth Ann Minner and NRG Energy officials announced Wednesday a \$1.5 billion "repowering" of the coal-fired Indian River Generating Station.

NRG's Northeast Region president, Curtis Morgan, said the company is moving forward with plans to build a "clean coal" plant on its Millsboro site, which will dramatically reduce Delaware's air pollution, create hundreds of jobs and provide 630 megawatts of new power.



Clean coal technology removes up to 90 percent of sulfur dioxide emissions, up to 80 percent of oxides of nitrogen emissions, and up to 75 percent of mercury emissions, according to NRG. The new plant also will have the ability to capture emissions of carbon dioxide, a "greenhouse gas" that contributes to global warming of the earth's atmosphere. Minner pointed out that NRG's proposal was encouraged by House Bill 6, that was passed in April, and is a comprehensive response to the lifting of Delmarva Power's price caps on electricity rates.

NRG must successfully compete in a process that begins this November but is moving forward with permitting efforts.

"NRG's idea was very straightforward, but untried in our state," Minner said. "This proposal will significantly improve our environment by turning a polluting facility into a model of state-of-the-art clean technology."

The plant will cost between \$1.4 billion and \$1.6 billion to build and is expected to be in operation by 2011-2012. The company also plans to install \$330 million worth of major emissions-control equipment on its Millsboro operation's existing coal-fired units.

The company estimates the project will contribute 400 to 1,000 jobs during the construction period and add 85 to 100 permanent jobs at the facility, which now employs 170 people.

**Delaware's dirtiest power plant wants to expand;  
Company's plan cuts air pollution by more than half**

The (DE) News Journal

Steven Church

6/22/2006

Air pollution from Delaware's dirtiest power plant would drop while electric generation would nearly double under a \$1.6 billion expansion plan announced Wednesday by the plant's owner.

NRG Energy Inc. said it plans to install pollution controls at the state's largest polluter, the Indian River Power Plant near Millsboro, and add cleaner-burning, coal-fired electric generators that could sell power at, or below, the high rates most Delaware residents and businesses began paying in the spring. The expansion is part of a broader plan that NRG announced Wednesday to spend \$16 billion on energy projects across the country.

The Indian River Power Plant produces 25 percent of the state's mercury emissions and 40 percent of its sulfur dioxide emissions, the pollutant most responsible for the yellow haze in smog. Under the company's plans, air pollution would be cut by more than half at the plant, even after new generators are installed to increase capacity. In 2004, the plant released 4.8 million tons of toxic emissions.

The Indian River Power Plant near Millsboro.

**INDIAN RIVER POWER PLANT**  
How much electricity does the plant generate?

737 megawatts, or enough for about 700,000 homes.

How much pollution does it release?

About 4.8 million tons of toxic emissions a year.

How much electricity would an expanded plant produce?

1,367 megawatts, or enough for about 1.3 million homes.

How much pollution would an expanded plant release?

Future pollution would drop 50 percent or more, depending on the type of controls put on generators.

**Power plant to expand; Emissions controls to be added at Indian River site**

Delaware State News (newszap)

Drew Volturo

6/22/06

DOVER — NRG Energy officials announced Wednesday plans to nearly double the electric generating capacity of its Indian River power plant in Millsboro by adding a \$1.5-billion coal gasification facility by 2012.

The plan also calls for dramatically reducing emissions from one of the state's worst polluting facilities by installing \$330 million in emissions controls and scrubbers on the existing plant.

"This is big for Delaware," Gov. Ruth Ann Minner said. "This will make a difference for the entire region, not just for our state.

"I believe in long-term solutions to problems, not just looking at today and tomorrow.

"We will see Indian River go from one of the worst polluting facilities in the state into a model of clean technology."

NRG's northeast region president Curtis Morgan said the proposal would help meet rising electric demand due in part to increasing population by adding 630 megawatts to the plant's 737-megawatt generating capacity.

"We're living in an electronic world," Mr. Morgan said. "The average home has more than 60 electric appliances.

"NRG has invested significant time, money and effort into this. Believe me, it's a viable technology."

The coal gasification plant, Mr. Morgan said, would convert coal to gas without burning the coal, which is what produces pollutants such as sulfur dioxide and nitrous oxide.

During the gasification process, coal is ground and heated. The gas that comes off the coal is cleaned and burned to generate electricity.

Although Mr. Morgan couldn't give an exact figure, he said electricity generated at the gasification plant would be priced at or below current market prices.

The proposed plant would be built on NRG's existing 1,100-acre site and would create 400 to 1,000 construction jobs, Mr. Morgan said.

The plant would add about 85 to 100 permanent jobs to the existing 170, he said.

In addition to the new construction, NRG plans to install pollutant controls and scrubbers to reduce mercury, nitrous oxide and sulfur dioxide emissions from the plant's four coal-fired generating units.

The plant released 3.89 million pounds of chemicals, more than 40 percent of the amount of chemicals released by all monitored facilities in the state, according to a 2003 Division of Air and Waste Management report.

The emission controls could reduce mercury emissions by 75 percent, nitrous oxide by 80 percent and sulfur dioxide by 90 percent.



Mr. Morgan said the plant would continue to run while the emission controls are installed.

Legislators and officials praised the plans for the Indian River power plant, which began producing electricity for the region in 1957.

"I've been a legislator for four years now and I've received a lot of letters from residents, including many written by elementary school students, who are concerned about the quality of their air," said Rep. John C. Atkins, R-Millsboro, whose district includes the plant.

"This investment is almost like a grand slam in the bottom of the ninth."

Sen. George H. Bunting Jr., D-Bethany Beach, was impressed by the size of the project, estimated at \$1.4-\$1.6 billion for the new gasification plant and \$330 million for the cleanup to the existing plant.

"It's probably the largest single investment in Sussex County in my lifetime," said Sen. Bunting, whose district also includes the plant.

"This is what the public has been demanding for a long time, the cleanup of the plant ... the jobs created is a bonus."

Post comments on this issue at [newszapforums.com/forum43](http://newszapforums.com/forum43)

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### **Huntley Station to double capacity, add jobs; Over 1,000 construction jobs needed for upgrade work**

The Buffalo News

David Robinson

6/23/2006

The proposed \$1.5 billion upgrade of the Huntley Station would more than double the current capacity of the Town of Tonawanda power plant and could increase its work force by up to 100 jobs, while creating upwards of 1,000 construction jobs, NRG Energy officials said Thursday. The coal-fired power plant, long criticized by environmentalists for being among the country's dirtiest, would be upgraded with 630 megawatts of clean coal burning units that would sharply reduce the facility's harmful emissions.

NRG officials said the plant, which is a baseload facility designed to operate continually, would be an important source of electricity for not only the upstate region but also neighboring areas in New England, and markets in Pennsylvania, New Jersey and Maryland. The demand for electricity in New York and those other nearby states is expected to grow by about 2 percent a year.



David Crane, left, president and chief executive officer of NRG Energy, and Curt Morgan, an NRG executive vice president, took part in a press conference Thursday in the Town of Tonawanda.

"In Western New York, a lot of the power finds its way outside the region," said Curt Morgan, an NRG executive vice president. "In Western New York, you have a lot of markets you can get to, and all of those markets are growing."

Huntley's increased generating capacity, which would jump to 1,010 megawatts when the plant comes on line in 2012 or 2013 from 552 megawatts today, also would help stabilize electricity prices in New York, Morgan said. About 140 people currently work at the plant.

"New York needs baseload generation to help stabilize costs," he said. "This will help reduce the volatility in the bills that we've seen in the last couple of years."

The upgrade project, part of a \$16 billion new construction program nationwide by NRG, would construct a new power plant on the Huntley site that would use Integrated Gasification Combined Cycle (IGCC) technology.

That process feeds coal into a gasification unit, where heat and pressure are used to convert the coal into combustible gas. That gas then is cleaned to remove sulfur and other contaminants before it is burned in a turbine, which then spins a generator. The sulfur then could be resold for commercial use and slag produced during the power generation process can be used as a base layer in road construction, Morgan said.

The Huntley upgrade, coupled with an upgrade and expansion of the company's Astoria power plant downstate, would reduce sulfur dioxide emissions from NRG's New York facilities by up to 85 percent, while cutting nitrogen oxide emissions by 74 percent and mercury emissions by 90 percent, NRG said.

"IGCC is a perfect fit here in the Town of Tonawanda," said Kevin Long, an official with Local 97 of the International Brotherhood of Electrical Workers union. "Here's an opportunity for us to rebuild Western New York."

Ronald Moline, the Town of Tonawanda supervisor, praised union officials for their willingness to work with NRG officials and commended the company for its focus on environmental issues.

"We are hearing today from some very enlightened industrialists and labor leaders," he said. "We are hearing industrialists say things you usually expect from environmentalists."

David Crane, NRG's president and chief executive officer, said the push for clean-coal technology reflects the difficulty in expanding or building conventional coal plants, as well as the belief that environmental standards will become even tougher in the future, possibly covering carbon dioxide emissions.

The upgraded Huntley Station would be able to eliminate emissions of carbon dioxide, a greenhouse gas linked to global warming, by sequestering the gas for storage underground using a technology that has not yet been developed.

"We believe, by the time this plant comes on line in 2012, we will have cracked the code on carbon dioxide sequestration," Morgan said.

The project also is a bet on the part of company officials that the price of natural gas, which is used to generate about 22 percent of the state's electricity, will remain high. Gas prices currently are just under \$7 per 1,000 cubic feet and Morgan said the Huntley project would be viable if gas prices stay above \$4.

"We feel pretty confident with that bet, given where the market is now," Morgan said.

The Huntley upgrade is contingent on the project being selected by the state as a designated clean coal power plant. The project also would need to obtain the required state permits, which Morgan said would be more complicated since the state's power plant siting law expired almost four years ago.

In addition, the company wants to line up long-term contracts, covering 15 to 20 years, for about 70 percent of the plant's capacity - a necessary step to obtain financing for the project, Morgan said.

NRG expects to finance the project primarily with bank borrowings and debt financing, although it also could take on minority investors.

The project would be eligible for Empire Zone benefits and also could receive federal tax credits and other state incentives.

If all goes according to plan, NRG said it could receive its permit for the new clean-coal units in 2008 and begin construction later that year, with the plant opening about 40 months later, probably sometime in 2012.

The project also would install emission control equipment on the two existing Huntley units, each with a capacity of 200 megawatts, that will remain in service. The installation of those emission controls is scheduled to begin next year and be completed by 2010.

**Presentation to Gasification Council**

**REDACTED**

Appendix 9

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
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**REDACTED**

## Appendix 10



**REDACTED**



**Appendix 11**  
**Other Key Project Team Members Qualifications**

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

**REDACTED**